Supreme Court, U.S.
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No.

IN THE

Supreme Court of the United States

PATRICIA A. WILLS, INDIVIDUALLY AND AS PERSONAL REPRESENTATIVE OF THE ESTATE OF RICKY LEE WILLS, DECEASED,
PETITIONER

v.

AMERADA HESS CORP., SPENTONBUSH/RED STAR COMPANIES, INC., SHERIDAN TRANSPORTATION CORP., AND HYGRADE OPERATORS INC.

PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE SECOND CIRCUIT

PETITION FOR WRIT OF CERTIORARI

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May 30, 2005

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QUESTION PRESENTED

Does the burden-shifting rule in maritime cases announced by this Court in *The Pennsylvania*, 86 U.S. (19 Wall.) 125 (1874), apply in actions under the Jones Act, 46 U.S.C. App. § 688?

STATEMENT REGARDING PARTIES

All parties to the proceeding are listed in the caption of the case.

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PETITION FOR WRIT OF CERTIORARI

Petitioner Patricia A. Wills respectfully requests this Court to grant her petition for a writ of certiorari to review the judgment of the United States Court of Appeals for the Second Circuit.

OPINIONS BELOW

The opinion of the court of appeals is reported at 379 F.3d 32 (CA2 2004), is unofficially reported at 2004 AMC 2082 (CA2 2004), and appears in the Appendix of this Petition ("Pet. App.") at 1a-40a. The court of appeals' unpublished order denying the petition for rehearing appears at Pet. App. 93a-94a.

The district court's opinion and order granting summary judgment is available electronically at 2002 U.S. Dist. LEXIS 12217, 2002 WL 1482624 (S.D.N.Y. 2002) but is otherwise unpublished. It appears at Pet. App. 41a-52a. The district court's earlier opinion and order conditionally granting summary judgment is available electronically at 2002 U.S. Dist. LEXIS 1546, 2002 WL 140542 (S.D.N.Y. 2002) but is otherwise unpublished. It appears at Pet. App. 53a-92a.

JURISDICTION

The court of appeals entered judgment on August 11, 2004, and denied a timely petition for rehearing on December 29, 2004. On January 31, 2005, Justice Ginsburg extended the time for filing a petition for cer-

tiorari until May 28, 2005. No. 04-A667. This petition is filed before that date.

This Court's jurisdiction is invoked under 28 U.S.C. § 1254(1). The district court had jurisdiction under 28 U.S.C. § 1331 and the Jones Act, 46 U.S.C. App. § 688(a).

RELEVANT STATUTORY PROVISION

The Jones Act, 46 U.S.C. App. § 688(a), provides in relevant part:

> Any seaman who shall suffer personal injury in the course of his employment may, at his election, maintain an action for damages at law, ... and in case of the death of any seaman as a result of any such personal injury the personal representative of such seaman may maintain an action for damages at law with the right of trial by jury, and in such action all statutes of the United States conferring or regulating the right of action for death in the case of railway employees shall be applicable....

STATEMENT OF THE CASE

The "*Pennsylvania* Rule" is one of the pillars of U.S. maritime law. Established by this Court well over a century ago to encourage compliance with maritime safety statutes and promote safety at sea, the Rule es-

tablishes a rebuttable presumption: If a shipowner violates a statutory rule intended to prevent the event that occurred, the violation is presumed to be a cause in fact of the event unless the shipowner shows that it could not have been. *See The Pennsylvania*, 86 U.S. (19 Wall.) 125, 136 (1874).[1]

Although the *Pennsylvania* Rule was announced in the context of a collision case, this Court has long recognized that it is a fundamental principle of broader application. In *The Martello*, 153 U.S. 64, 74 (1894), for example, the Court described the Rule as "a presumption which attends every fault connected with the management of a vessel, and every omission to comply with a statutory requirement, or with any regulation deemed essential to good seamanship."

As a basic principle of maritime law, the *Pennsylvania* Rule is regularly applied in non-collision cases. The issue here is whether the Rule should apply in cases under the Jones Act, 46 U.S.C. App. § 688, which gives seamen a negligence remedy against their employers for personal injury or wrongful death. "[T]he majority position"[2] holds that the Rule applies in Jones

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[1] In *Waring v. Clarke*, 46 U.S. (5 How.) 441, 465 (1847), this Court recognized an earlier form of the Rule when it declared:

> [If] neglect or disobedience of the law shall be proved to exist when injury shall occur to persons or property, it would throw upon the master and owner of a steamboat by whom the law has been disregarded the burden of proof, to show that the injury done was not the consequence of it.

[2] *Marine Solution Services, Inc. v. Horton*, 70 P.3d 393, 407 (Alaska 2003).

Act cases. But at least two circuits, including the court below, hold that it does not. Because this well-percolated conflict potentially affects every seaman who may be injured and every employer that may be liable for that injury, this Court should grant certiorari to resolve the conflict.

The *Pennsylvania* Rule

In *The Pennsylvania*, a 2300-ton steamship speeding through a dense fog ran down a sailing ship traveling at one mile per hour. The steamship was seriously at fault. The sailing ship was in breach of a regulation requiring it to use a foghorn while under way; it was instead ringing a bell, which was the appropriate signal for a stationary sailing ship. *See* 86 U.S. at 126-29.

The Court recognized that the sailing ship's admitted breach may or may not have contributed to the accident. The ships might have collided even if the sailing ship had used its foghorn. Because this "speculation [was] rendered necessary by a certain fault of the [sailing ship]," *id.* at 137, the Court considered it appropriate to reverse the usual burden of proof "to enforce obedience to the mandate of the statute," *id.* at 136. Otherwise a shipowner could violate a statute without penalty when—as is often the case—the injured party is unable to prove the causal connection with the loss.

The *Pennsylvania* Rule has proven to be among the most durable and important in U.S. maritime law. One commentator determined that *The Pennsylvania* "is the most frequently cited admiralty case decided by the Supreme Court in either the eighteenth or nine-

teenth centuries." Gary Pitts, *Admiralty's* Pennsylvania *Rule*, 24 S. TEX. L.J. 541, 541 (1983). The *Pennsylvania* Rule is, moreover, particularly well suited to the needs of maritime law, which frequently recognizes the need to allocate burdens of proof differently than on land, *see, e.g.*, GRANT GILMORE & CHARLES L. BLACK, JR., THE LAW OF ADMIRALTY § 3-23, at 141 (2d ed. 1975).

Factual Background

From 1985 to 1995, petitioner's late husband, Ricky Lee Wills ("Wills"), served as a seaman on respondents' vessels transporting petroleum-based fuels such as crude oil, jet fuel, kerosene, and gasoline. Pet. App. 3a. As a result of serving on vessels carrying these cargoes, Wills was regularly exposed to known carcinogens including benzene. *Id.*

During the period of Wills's employment, respondents were in violation of Coast Guard regulations[3] that are intended to limit seamen's exposure to unsafe levels of benzene (and thus reduce the number of cancer deaths among these seamen). *See id.* 14a (citing 46 C.F.R. §§ 197.505, 197.515, 197.540).

Shortly after leaving respondents' employment, Wills was diagnosed with squamous cell carcinoma. *Id.* at 3a. Despite an aggressive treatment regime, the

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[3] Because Coast Guard regulations are enacted pursuant to statutory authority, they have "the force of statutory enactment," and their breach implicates the *Pennsylvania* Rule. *See Belden v. Chase*, 150 U.S. 674, 698 (1893).

cancer progressed and Wills died less than a year later—at the age of thirty-nine. *Id.*

Medical science still has much to learn about cancer in general and squamous cell carcinoma in particular. Although it stands to reason that excessive exposure to benzene, a known carcinogen, may well have contributed to Wills's cancer, the district court concluded that the link has not yet been proven with the degree of scientific certainty necessary to satisfy the rigorous standards for admissible evidence under Fed. R. Evid. 702 and this Court's decision in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993).

Proceedings Below

Petitioner filed the present wrongful death action in the U.S. District Court for the Southern District of New York, invoking the court's law-side jurisdiction under 28 U.S.C. § 1331 and the Jones Act, 46 U.S.C. App. § 688(a). Because admiralty jurisdiction could have been asserted under 28 U.S.C. § 1333(1), maritime law governs the case. *See, e.g., Norfolk Southern Ry. Co. v. James N. Kirby, Pty Ltd.*, 125 S. Ct. 385, 392-93 (2004).

The bulk of the proceedings below focused on evidentiary issues that are not before this Court. The proceedings relevant to this petition can be described briefly. When respondents filed a motion for summary judgment to dismiss petitioner's case, petitioner moved to impose the *Pennsylvania* Rule. *See* Pet. App. 53a. The district court denied petitioner's motion on the authority of *Wilkins v. American Export Isbrandsten*

Lines, Inc., 446 F.2d 480, 486 (CA2 1971). *See* Pet. App. 86a-89a. The district court subsequently granted respondents' motion for summary judgment. *Id.* at 52a.

The Second Circuit affirmed, *see id.* at 13a-20a, also relying on *Wilkins* for its conclusion that it would not be appropriate to "'extend the admiralty rule of *The Pennsylvania* . . . to embrace Jones Act cases,'" *id.* at 19a-20a (quoting *Wilkins*, 446 F.2d at 486) (omission in opinion below).

REASONS FOR GRANTING THE PETITION

I. The state and lower federal courts are in irreconcilable and acknowledged conflict on the applicability of the *Pennsylvania* Rule in actions under the Jones Act

The decision below reaffirms an extreme position in a square conflict involving at least three circuits and a state supreme court. Two other circuits have expressed positions on the issue and two more have contributed to the debate. Lower courts and commentators have recognized the conflict. This Court's intervention is required to restore the uniformity that is so essential in this field.

A. The restrictive position

Two circuits have directly restricted the *Pennsylvania* Rule to prohibit its application in Jones Act cases and a third is commonly understood to have done so.

1. The Second Circuit. The Second Circuit established its current rule in *Wilkins v. American Export Isbrandsten Lines, Inc.*, 446 F.2d 480 (CA2 1971). The *Wilkins* seaman suffered a fatal heart attack while at sea after being required to work overtime in violation of a statute prohibiting such demands. His estate argued that the excessive workload caused the heart attack and claimed that the *Pennsylvania* Rule put the burden on the shipowner to prove that its statutory breach could not have caused his death. Rejecting this claim, the *Wilkins* court held:

> [W]e are not persuaded that there are broad considerations of policy which require that we extend the admiralty rule of The Pennsylvania beyond the chosen area of ship collisions to embrace Jones Act cases.

446 F.2d at 486.

More than thirty years later, the court below quoted and followed the long-established *Wilkins* precedent to reaffirm the Second Circuit view that the *Pennsylvania* Rule does not apply in Jones Act cases. Pet. App. 19a-20a.

2. The Sixth Circuit. Although the Sixth Circuit did not cite *The Pennsylvania* in *Epling v. M.T. Epling Co.*, 435 F.2d 732 (CA6 1970), that decision nevertheless rejects the application of the *Pennsylvania* Rule in Jones Act cases. In affirming the district court's directed verdict for the defendant in a Jones Act case despite the seaman's claim of a breach of a Coast Guard regulation, the court declared:

> [T]he mere violation of a maritime statute or regulation does not establish liability. A causal connection between the violation and the injury must be shown.... Therefore the inquiry with respect to the defendant's [statutory breach] is, as with the other allegations of negligence, whether there is any evidence from which a jury could reasonably infer that some negligent act or omission contributed to the decedent's death.

435 F.2d at 735 (citation omitted).[4]

3. The Third Circuit. The Third Circuit's decision in *Pierro v. Carnegie-Illinois Steel Corp.*, 186 F.2d 75 (CA3 1950), is often cited for the proposition the *Pennsylvania* Rule does not apply under the Jones Act. Indeed, the court below cited *Pierro* in support of its holding. Pet. App. 20a. On closer analysis, the Third Circuit's position is not quite so clear.

The *Pierro* seaman, much like the *Wilkins* seaman, collapsed on duty and died after working overtime to cover for a missing colleague. His estate claimed the benefit of the *Pennsylvania* Rule in the ensuing Jones

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[4] In a prior Jones Act case, the Sixth Circuit held that a breach of a Coast Guard regulation governing fire extinguishers was irrelevant because "there must be a causal connection between the breach ... and the death of the seaman." *Nolan v. R.W. Greene, Jr., Sand & Gravel Co.*, 383 F.2d 814, 817 (CA6 1967). But the court did not address the burden of proof. Moreover, the regulation would not have been intended to prevent the seaman's drowning death so the *Pennsylvania* Rule, by its terms, would not have applied.

Act suit because the employer had breached the federal statute requiring a full crew. Rejecting this claim, the *Pierro* court explained that the Rule's presumption of causation

> is a product of a philosophy peculiar to United States admiralty law, that disasters are likely to occur when statutes passed for the express purpose of promoting safety in navigation are violated. We do not consider such a presumption appropriate to the instant controversy.

186 F.2d at 78 (footnote omitted). Perhaps the last sentence of this quotation was intended to mean that the Rule's presumption was never "appropriate" outside of its original collision context, or at least never in the Jones Act context. If this reading were correct, then the Third Circuit would be aligned with the Second and Sixth in the present inter-circuit conflict.

It is at least as likely that the key sentence was intended to mean simply that the Rule's presumption was not appropriate on the *Pierro* facts. It spoke of "the instant controversy" rather than more generally of the Jones Act. And the paragraph spoke generally of disasters, not simply of collisions. Perhaps the most telling indication of the court's intent is the accompanying footnote, which explained that the "express purpose" of the federal statute at issue was not to protect crewmen from excessive overtime work but to ensure that the crew on board would be sufficient to deal with emergencies. *See* 186 F.2d at 78 n.5. In short, the prerequisites for applying the *Pennsylvania* Rule had not been satisfied. If this reading is correct, then the Third

Circuit is on neither side of the inter-circuit conflict and *Pierro* is simply evidence of the confusion that exists in the lower courts—making this Court's guidance essential.

B. The majority position

The circuit with the most experience in Jones Act cases[5] and an important state supreme court[6] have squarely held that the *Pennsylvania* Rule applies in Jones Act cases. Other courts have also recognized the application of the Rule in this context.

1. The Fifth Circuit.[7] The application of the *Pennsylvania* Rule to Jones Act cases in the Fifth Circuit has been clearly established for at least a quarter-century.[8] In *Reyes v. Vantage Steamship Co.*, 609 F.2d 140 (CA5 1980), the shipowner was in breach of "Coast Guard regulations requir[ing] the ship to have a rocket powered line-throwing appliance capable of throwing at least 1,500 feet of line," *id.* at 143, when a seaman

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[5] This Court has recognized the Fifth Circuit's experience and expertise in Jones Act matters. *See, e.g., Chandris, Inc. v. Latsis*, 515 U.S. 347, 365 (1995).

[6] Alaska is a significant forum for Jones Act suits because of the state's substantial fishing industry.

[7] Because the issue was decided in the "old" Fifth Circuit before October 1, 1981, *see Bonner v. City of Prichard*, 661 F.2d 1206, 1207 (CA11 1981) (en banc), the *Pennsylvania* Rule also applies in Jones Act cases in the Eleventh Circuit. *See also infra* note 9.

[8] The issue was raised earlier in *Wilson v. Oil Transport Co.*, 242 F.2d 727, 729 (CA5 1957), but the court did not resolve it, apparently because it felt that the jury had concluded that there had been no breach of a statutory duty.

drowned "beyond reach of a hand-thrown line or life ring," *id.* at 142. The court (in an opinion by Chief Judge John R. Brown, an esteemed admiralty jurist) recognized that the proper equipment might not have been enough to save the seaman, *id.* at 144, but held that the *Pennsylvania* Rule put the burden of proving that on the shipowner, *id.* at 144-46.[9]

2. The Alaska Supreme Court. In *Marine Solution Services, Inc. v. Horton*, 70 P.3d 393 (Alaska 2003), a seaman standing on the deck of a barge under tow was severely injured when the towline snapped across the deck. *Id.* at 400. His employer was in violation of a Coast Guard regulation limiting the size of the tug boat that the captain was authorized to operate and of an international regulation requiring every vessel to maintain a proper lookout. *Id.* at 407-08. The Alaska Supreme Court, "adopt[ing] the majority position," *id.* at 407, held that the trial court had properly applied the *Pennsylvania* Rule to shift the burden to the defendant "to show that [each] violation *could not have been one of the causes* of the injuries," *id.* at 406 (emphasis in original). In addition to following well-established precedent, the court noted that the Rule simply "reverses the burden of proof" but "does not determine a party's share of liability," *id.*, and concluded that it was correct

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[9] In *Candies Towing Co. v. M/V B & C Eserman*, 673 F.2d 91, 94 (CA5 1982), the Fifth Circuit—in order to demonstrate that the *Pennsylvania* Rule was not confined to collision cases—confirmed that it had applied the Rule in *Reyes*. *See also Florida East Coast Ry. Co. v. Revilo Corp.*, 637 F.2d 1060, 1066 (CA5 Unit B 1981) (citing *Reyes* as a "Jones Act case in which this court approved the application of the Pennsylvania Rule"). Unit B was the immediate predecessor of the Eleventh Circuit. *Cf. supra* note 7.

to "allocate[] the burden of proof to the party in violation of the statute or regulation," *id.*

3. The Ninth Circuit. In *Pacific Coast Coal Co. v. Alaska Steamship Co. ("The Denali")*, 112 F.2d 952 (CA9 1940), the Ninth Circuit was one of the first to recognize the majority rule, albeit in a dictum, declaring:

> The rule and presumption established in *The Pennsylvania* . . . control in [actions] *for injury to sailors* or cargo where the vessel has violated the positive command of a safety statute . . . .

Id. at 955 (citation omitted) (emphasis altered). More recent dicta confirmed the court's continuing recognition of the majority position. *See Mathes v. The Clipper Fleet*, 774 F.2d 980, 982-83 (CA9 1985) (recognizing the broad applicability of the *Pennsylvania* Rule in a seaman's personal injury action but holding that a jury instruction on the Rule was unnecessary when "there is no conceivable causal connection between the violation and the injury").[10]

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[10] The Seventh Circuit is in a similar position. In *First National Bank of Chicago v. Material Service Corp.*, 544 F.2d 911 (CA7 1976), it held that the *Pennsylvania* Rule applied in a maritime personal injury case involving recreational boaters. Because maritime law provides greater protection for Jones Act seamen, it logically follows that the Seventh Circuit would accept the majority position. The *First National Bank* court's broad approach also suggested that the Rule applied generally, without regard to the context of the case.

C. A third group of courts is confused about whether to and, if so, how to apply the *Pennsylvania* Rule

The First Circuit decided *Poulis-Minott v. Smith*, 388 F.3d 354 (CA1 2004), on the implicit assumption that the *Pennsylvania* Rule applies in Jones Act cases. But then the court's application of the Rule was so grudging that it served no practical purpose. As a result, the First Circuit seems to occupy a middle position in which the Rule applies in Jones Act cases only when its application is least relevant.

The *Poulis-Minott* vessel was lost at sea when the safety equipment on board did not comply with Coast Guard regulations, but due to the complete lack of evidence it was impossible to know whether the presence of complying safety equipment might have saved the seaman's life. *See* 388 F.3d at 363-64. On these facts, the First Circuit held that the plaintiff did not benefit from the Rule. To reach this result, it misconstrued this Court's statement in *The Pennsylvania* that the statutory violation should be ignored "if it clearly appears" that it "could have had nothing to do with the disaster," 86 U.S. at 136. This common-sense limitation—applicable only when a defendant would have no trouble to carry its burden anyway—was converted into a nonsensical requirement that the plaintiff show that "the violation or 'fault' must have contributed to the casualty, at least in some degree," 388 F.3d at 364, before the burden shifts to the defendant to prove the exact opposite.[11]

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[11] The *Pennsylvania* Court's reasoning plainly illustrates that a plaintiff need only show that the statutory breach *might* have con-

Other lower courts have been uncertain whether to apply the *Pennsylvania* Rule. In *Mason v. Lynch Brothers Co.*, 228 F.2d 709 (CA4 1956), the Fourth Circuit concluded that the causal connection between the shipowner's statutory breach and the seaman's injury was so clear that it was "unnecessary to decide" whether the Rule "extends beyond collision cases to suits under the Jones Act." *Id.* at 712.

These cases illustrate the need for this Court's guidance and demonstrate that the broader issues have adequately percolated in the lower courts. The question presented here is ripe for review.

D. The conflict is well-recognized by courts and commentators

The lower courts are in disarray on the question presented here. The Second Circuit, in agreement with the Sixth Circuit, has consistently taken a restrictive approach that other courts have implicitly and explicitly rejected. At the other end of the spectrum, the majority position holds that the *Pennsylvania* Rule is fully applicable in Jones Act cases. Those courts in the middle, which are uncertain whether or how to apply the Rule, illustrate further confusion.

The lower courts have acknowledged their own disagreements. In the decision below, for example, the Second Circuit explicitly declared:

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tributed to the loss. Although the *Poulis-Minott* court condemned the plaintiff for "offer[ing] . . . nothing but speculation," 388 F.3d at 365, the *Pennsylvania* Court explained why "speculation" was necessary and justified, 86 U.S. at 137.

> We are aware that in the years since we decided *Wilkins*, some courts have applied *The Pennsylvania* Rule in Jones Act cases.

Pet. App. 20a (citing *Reyes*; *Horton*). *See also Horton*, 70 P.3d at 407 n.46 (citing and quoting *Wilkins*).

Finally, academic commentators have noted the conflict in the scholarly literature. *See, e.g.*, Warren B. Daly, Jr., *The* Pennsylvania *Rule: Charting a New Course for an Ancient Mariner*, 54 B.U. L. REV. 78, 94 (1974) (noting "disagreement over further extensions of the Rule," including "accidents resulting in death or personal injury"). As one commentator explained:

> One of the important unresolved issues concerning the Pennsylvania Rule is whether it will be extended to ... cases brought pursuant to the Jones Act.

Pitts, *supra*, 24 S. TEX. L.J. at 564; *see also* Michael Ben-Jacob, *The* Pennsylvania *Rule: Murky Waters Revisited*, 19 CARDOZO L. REV. 1779, 1796-98 (1998) (quoting Pitts and describing the conflict).

The conflict has existed for decades and in the last few years it has grown stronger. The decision below solidified the Second Circuit's long-standing restrictive position while the Alaska Supreme Court's *Horton* decision barely a year before strengthened the majority rule. When the courts on the opposite ends of the spectrum show no signs of moving toward the center, it is obvious that the lower courts will not be able to resolve the conflict without this Court's intervention.

II. The Second Circuit rule is inconsistent with the decisions of this Court confirming the general maritime law's "special solicitude" for seamen

Seamen have been treated as "wards of the admiralty" since Justice Story's landmark decision in *Harden v. Gordon*, 11 F. Cas. 480, 485 (C.C.D. Me. 1823) (No. 6,047). Thus "admiralty courts have always shown a special solicitude for the welfare of seamen and their families." *Miles v. Apex Marine Corp.*, 498 U.S. 19, 36 (1990); *see also, e.g., Moragne v. States Marine Lines, Inc.*, 398 U.S. 375, 387 (1970) (general principles of maritime law include "a special solicitude for the welfare of those men who undertook to venture upon hazardous and unpredictable sea voyages").

In view of this "special solicitude for the welfare of seamen and their families," it would be ironic if the *Pennsylvania* Rule were held to protect only those who seek to recover for property damages (as in *The Pennsylvania* itself) while "seamen and their families" are required to carry a higher burden under the Jones Act to recover for personal injury and wrongful death.

In *The Pennsylvania*, six men on the sailing vessel drowned. 86 U.S. at 127. If the case arose on the same facts today, the Second Circuit rule would permit the owner of the steamship to recover from the owner of the sailing vessel for the property damage but it would not allow the six families to recover under the Jones Act for their losses in the same incident. Such a bizarre result would turn this Court's seamen's injury jurisprudence on its head.

Although this Court has never directly addressed the precise question presented here, the Second Circuit's restrictive rule is not only inconsistent with the general tenor of the foregoing decisions but also difficult to square with two of this Court's prior decisions in analogous contexts. *Kernan v. American Dredging Co.*, 355 U.S. 426 (1958), was very similar to the present case in many respects as it involved a seaman's wrongful death claim under the Jones Act against an employer that was in breach of a statutory duty. The *Pennsylvania* Rule was not directly implicated because there was no cause-in-fact dispute. *Cf.* 355 U.S. at 442 n.1 (Harlan, J., dissenting). But this Court held that the employer's breach permitted the seaman's estate to recover "in the absence of any showing of negligence," *id.* at 431, and "without regard to whether the injury flowing from the breach was the injury the statute sought to prevent," *id.* at 433. This relieved the seaman of the obligations to prove negligence *and* proximate cause. In light of *Kernan*'s strong condemnation of an employer's breach of a statutory duty, the Second Circuit's refusal in the same context to apply a widely accepted maritime-law rule that merely shifts the burden of proving factual causation seems perverse.

Garrett v. Moore-McCormack Co., 317 U. S. 239 (1942), did not involve a breach of statutory duty, but it illustrates this Court's willingness to protect an injured seaman by shifting the normal burdens of proof. In *Garrett*, a seaman sought to avoid the release he had signed purporting to give up his rights under the Jones Act. Under land-based tort law, the burden would have been on the plaintiff to invalidate the release. Under maritime law, the strong policy of protecting seamen

puts the burden on the defendant to sustain the release. *See* 317 U. S. at 248. In light of the maritime law's willingness to shift normal burdens of proof to protect injured seamen, it is difficult to understand the Second Circuit's rule denying seamen—the wards of the admiralty—the benefit of a burden-shifting rule that is generally available under maritime law.

These inconsistencies with this Court's decisions justify review in this case.

III. The decision below cleanly presents an important issue that this Court should resolve

A. The issue is important and ripe for resolution

Resolution of the question here not only will determine whether seaman recover for their injuries but also will have a major impact on the extent to which employers observe the Coast Guard's regulations. The issue has percolated in the lower courts for decades. The circuits have been directly addressing the subject for over half a century and a square conflict has existed for at least a quarter-century. Yet *Poulis-Minott*, *Horton*, and the decision below demonstrate that it remains an active debate in which this Court's guidance would be timely. All the major maritime circuits have spoken on the issue and relevant authority of some sort—illustrating a range of possible approaches—exists in all of the coastal circuits. In sum, the issue is ripe for this Court's review.

B. The widespread conflict creates serious problems for maritime workers and employers

By the very nature of the industry that it governs, maritime law demands uniformity. This Court powerfully reaffirmed this fundamental principle as recently as last November. *See Norfolk Southern Ry. Co. v. James N. Kirby, Pty Ltd.*, 125 S. Ct. 385, 395-96 (2004). The need for uniformity is every bit as strong in the present context as in *Kirby*. During his employment on respondents' vessels, Wills worked regularly in the ports and navigable waters of the First, Second, Third, Fourth, Fifth, and Eleventh Circuits, which have taken five different approaches to the question presented here. Under the venue rules applicable to Jones Act suits, this case could have been heard in a state or federal court in any one of these places.[12] The failure to resolve the conflict would be an invitation to forum shopping.

This Court has often recognized the disadvantage of a rule under which a worker walks into and out of Jones Act coverage. *See, e.g., Chandris, Inc. v. Latsis*, 515 U.S. 347, 363 (1995). Unless this Court resolves the inter-circuit conflict presented here, Wills will have

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[12] Although the Jones Act has a venue provision, Jones Act cases brought in admiralty are instead subject to the admiralty venue rules, which means that venue is proper wherever the parties are subject to personal jurisdiction and can be served with process. *See* DAVID W. ROBERTSON, STEVEN F. FRIEDELL & MICHAEL F. STURLEY, ADMIRALTY AND MARITIME LAW IN THE UNITED STATES 121, 575 n.3 (2001). Jones Act cases in state court are subject to the state's venue rules. *See id.* at 575 n.3 (citing *American Dredging Co. v. Miller*, 510 U.S. 443, 457 (1994)).

spent his career sailing into and out of significantly different types of Jones Act coverage. And of course the resolution of this conflict is important not only to seamen protected by the Jones Act (and their families) but also to their employers (and the employers' insurers). *See id.*

C. This case offers an ideal vehicle to resolve this important issue

Unlike many cases presenting the *Pennsylvania* Rule issue in conjunction with questions about the proper application of the Rule, this case presents the question cleanly. The court of appeals assumed (as required on respondents' motion for summary judgment) that respondents had violated the regulations and that the regulations were intended to prevent the harm that occurred. The respondents never offered any evidence to carry their burden under the Rule. Thus the sole question presented here is whether the Rule applies. This case accordingly offers an ideal vehicle for the Court to resolve an entrenched, multi-circuit conflict on an important issue of maritime law.

CONCLUSION

The petition for a writ of certiorari should be granted.

Respectfully submitted,

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May 27, 2005

(Any footnotes trail end of each document)

Docket No. 02-7913

UNITED STATES COURT OF APPEALS
FOR THE SECOND CIRCUIT

PATRICIA A. WILLS, individually and as personal representative of the Estate of RICKY LEE WILLS, deceased, on behalf of Ricky Lee Wills and those persons similarly situated,
Plaintiff-Appellant,

v.

AMERADA HESS CORP., SPENTONBUSH/RED STAR COMPANIES, INC., SHERIDAN TRANSPORTATION CORP. and HYGRADE OPERATORS INC.,
Defendants-Appellees.

August 7, 2003, Argued
August 11, 2004, Decided

COUNSEL: KENNETH HELLER, Kenneth Heller P.C., New York, NEW YORK, for Plaintiff-Appellant.

ROBERT J. KELLY, Wilson, Elser, Moskowitz, Edelman & Dicker, LLP, Newark, NJ, (James M. Hazen, Hill, Betts & Nash LLP, New York, NEW YORK, of counsel), for Defendants-Appellees.

JUDGES: Before: JACOBS and SOTOMAYOR, Circuit Judges. *

OPINION BY: SOTOMAYOR

OPINION: SOTOMAYOR, Circuit Judge:

Plaintiff-appellant Patricia A. Wills ("Wills" or "plaintiff") seeks damages under the Jones Act, 46 U.S.C. § 688(a), general maritime law, and New York state law for losses related to the 1996 death of her husband, Ricky Lee Wills ("decedent"), from cancer complications. Wills alleges that decedent's illness and death are attributable to his exposure to hazardous chemicals while working aboard ships owned and operated by defendants-appellees Amerada Hess Corporation, SpentonBush/Red Star Companies, Inc., Sheridan Transportation Corporation, and Hygrade Operators, Inc. (collectively "defendants"). The district court granted summary judgment in favor of defendants upon concluding that Wills failed to proffer sufficient admissible evidence of causation. See Wills v. Amerada Hess Corp., 2002 U.S. Dist. LEXIS 1546, No. 98 CIV. 7126 (RPP), 2002 WL 140542, at *17 (S.D.N.Y. Jan. 31, 2002).

On appeal, Wills argues that the district court erred in holding that the burden of proof as to causation rested with her, and that the district court abused its discretion in excluding her proposed experts' testimony on the issue of causation. Specifically, Wills contends that because her suit was brought under the Jones Act, the burden-shifting rule prescribed by The Pennsylvania, 86 U.S. (19 Wall.) 125, 22 L. Ed. 148 (1873) ("The Pennsylvania Rule" or "the Rule"), should apply, and the standards of reliability to which expert testimony is held under Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579, 125 L. Ed. 2d 469,

113 S. Ct. 2786 (1993), should be relaxed. For the reasons discussed below, we disagree with both contentions and affirm the district court's judgment granting defendants summary judgment on Wills's claims.

BACKGROUND

From 1985 to 1995, decedent served as a seaman aboard vessels owned or operated by defendants. These vessels transported petroleum-based fuels such as crude oil, jet fuel, kerosene, and gasoline. In December 1995, roughly four months after leaving defendants' employ, decedent was diagnosed with squamous cell carcinoma. Although he underwent an aggressive treatment regime, the cancer progressed. He died on October 2, 1996, at the age of thirty-nine.

Decedent's wife and executrix of his estate, Patricia A. Wills, filed this suit in October 1998, alleging that decedent's cancer was due, in part, to his harmful exposure to benzene and polycyclic aromatic hydrocarbons ("PAHs") while working aboard defendants' vessels. Her complaint raised claims of wrongful death, unseaworthiness, and maintenance and cure under general maritime law, negligence and loss of consortium under New York state law, and negligence and wrongful death under the Jones Act. n1 Pursuant to a schedule set by the district court, discovery was to be completed by August 31, 1999, and trial was to begin in September of that year.

For purposes of this appeal, we summarize only those aspects of the protracted discovery process that relate to Wills's proposed experts. Defendants first sought to

identify Wills's experts and the nature of the experts' anticipated testimony through interrogatories, propounded on April 21, 1999. Wills moved to strike the interrogatories. The district court denied her motion and ordered Wills to respond by May 25, 1999. In late August 1999, Wills disclosed the names of three proposed expert witnesses: Jesse H. Bidanset, Ph.D., a forensic toxicologist; Cynthia W. Duffield, a civil engineer; and Richard C. Rodi, an engineer and basic ship design manager. Instead of scientific reports describing the nature of the experts' research and detailed descriptions of their anticipated testimony, Wills provided defendants with only superficial descriptions of the experts' intended testimony. The district court ordered Wills to produce more detailed expert reports by November 1, 1999.

At a November 4, 1999 hearing, the district court, in response to defendants' assertion that there was no proven link between benzene exposure and squamous cell carcinoma, ordered Wills to provide, within two weeks, a scientific report establishing such a causal link. On November 19, 1999, Wills produced a "preliminary report" authored by Dr. Bidanset (the "First Report"), which concluded "with reasonable scientific certainty that [decedent's] occupational exposure to various petroleum products was the most probable cause of his squamous cell carcinoma." The brevity of the First Report, and, inter alia, its failure to cite sufficient scientific evidence to support its conclusion, prompted the district court to continue its December 6, 1999 order staying further discovery until Dr. Bidanset could be deposed and the admissibility of his testimony determined. Wills v. Amerada Hess

Corp., 2000 U.S. Dist. LEXIS 319, No. 98 CIV. 7126 (RPP), 2000 WL 42201, at *3 (S.D.N.Y. Jan. 19, 2000).n2

On April 28, 2000, Wills provided defendants with another report from Dr. Bidanset (the "Second Report"), and Dr. Bidanset's deposition was taken later that year. In the Second Report, Dr. Bidanset also advanced the "oncogene theory" of causation - a theory which, by his own admission, is "controversial." Wills, 2002 U.S. Dist. LEXIS 1546, 2002 WL 140542, at *14. The more widely-accepted scientific theory of causation - the so-called "dose-response" theory - suggests that toxins are only carcinogenic when a person is exposed to concentrations over and above a specified threshold level. Below the specified threshold level, the effects of the toxins are thought to be benign. In contrast, Dr. Bidanset's oncogene theory suggests that for some toxins there is no safe level of exposure because the cancer can be triggered by the interaction of a single molecule of the toxin with a single human cell. Dr. Bidanset surmised that decedent's cancer had developed in the manner predicted by the oncogene theory.

On January 2, 2001, appellees moved to exclude Dr. Bidanset's testimony, and for summary judgment on all claims. In response, Wills moved to apply The Pennsylvania Rule to her claims, thereby shifting the burden of proof on the issue of causation to appellees. Further, Wills submitted two additional expert reports - from Dr. Alfred Neugut, an oncologist and epidemiologist, and Paul Haas, an industrial hygienist - with her response papers. The district court refused to consider these additional expert reports, excluding them as untimely. (Order of Feb. 26, 2001).

In an opinion and order dated January 31, 2002, the district court granted defendants' motion to exclude the proposed testimony and reports of Dr. Bidanset, finding them to be without sufficient indicia of reliability as required for admissibility under Rule 702 of the Federal Rules of Evidence ("Rule 702"). Wills, 2002 U.S. Dist. LEXIS 1546, 2002 WL 140542 at *13-15. First, the district court rejected Wills's contention that the standards for admissibility under Daubert are relaxed in cases brought under the Jones Act. Id. 2002 U.S. Dist. LEXIS 1546, at *9. Second, applying Daubert's non-exhaustive list of factors to be considered when admitting evidence under Rule 702, the district court found Dr. Bidanset's opinions insufficiently reliable to be admissible under Rule 702. Id. 2002 U.S. Dist. LEXIS 1546 at *15. Specifically, the district court found that Dr. Bidanset's First Report - which the district court deemed devoid of scientific evidence linking squamous cell carcinoma to exposure to benzene and PAHs, the toxins to which decedent allegedly was exposed - "demonstrated that Dr. Bidanset was ready to form a conclusion first, without any basis, and then try to justify it." Id. 2002 U.S. Dist. LEXIS 1546 at *10. Further, the district court noted that Dr. Bidanset conceded in his deposition that he was unaware of any scientific studies that would support his contention, made in the First Report, that the "aggressiveness" of decedent's cancer demonstrates that he was "intensely exposed to . . . carcinogenic hydrocarbons." Id.

With regard to the Second Report, the district court was skeptical of Dr. Bidanset's assumption that decedent was exposed to benzene, PAHs, and diesel exhaust emissions - an assumption that Dr. Bidenset

based largely on the fact that the vessels on which decedent worked were powered by diesel engines and carried petroleum products. Although Dr. Bidanset was able to document that, on at least some of the defendants' vessels, benzene emissions occasionally exceeded levels permitted by the Occupational Safety and Health Administration ("OSHA"), the district court found no evidence that decedent worked on any of those particular vessels at the times when such high levels were recorded. Id. 2002 U.S. Dist. LEXIS 1546 at *10. Dr. Bidanset also relied on the affidavit of another seaman, Mark Miller, who, for a period of five months, intermittently worked with decedent aboard defendants' ships. Miller averred that both he and decedent were exposed to noxious odors, but the district court discounted the value of such statements on the ground that Miller lacked the expertise necessary to determine the toxicity of the fumes. Id. 2002 U.S. Dist. LEXIS 1546 at *11.

Next, the district court considered the scientific studies upon which Dr. Bidanset relied, all of which involved animal, rather than human subjects. The district court noted that Dr. Bidanset failed to establish a link between benzene and PAH exposure and squamous cell carcinoma. Id. 2002 U.S. Dist. LEXIS 1546 at *11-12. The court further noted that, by Dr. Bidanset's own admission, the cancer most linked to benzene exposure is leukemia. Id. 2002 U.S. Dist. LEXIS 1546 at *12. The district court observed that, in failing to establish a nexus between benzene and PAH exposure and decedent's cancer, Dr. Bidanset indicated that "he is not even sure whether benzene is capable of causing Decedent's [squamous cell carcinoma]." Id. 2002 U.S. Dist. LEXIS 1546 at *12.

Observing that courts should be cautious in presuming that findings derived from animal studies are applicable to humans, the district court nevertheless scrutinized the animal studies which purportedly established a link between benzene and squamous cell carcinoma. The district court observed that in studies in which mice inhaled the toxin, the causal link between benzene and squamous cell carcinoma was only tenuous. Id. Although such a link was stronger in studies in which rats ingested large quantities of benzene, the district court doubted the pertinence of those studies because there was no suggestion that decedent ingested benzene, let alone at such high doses or for comparable durations. Id.

The district court also expressed dissatisfaction with Dr. Bidanset's failure to account adequately for the possibility that decedent's cigarette smoking and alcohol consumption caused his squamous cell carcinoma. Id. Although Dr. Bidanset conceded that smoking is the most frequent cause of squamous cell carcinoma, the Second Report summarily discounted the fact that decedent smoked between one and two packs per day for over twenty years. According to Dr. Bidanset, smoking was not likely the cause of decedent's cancer, because it usually takes decades for cigarette smoking to cause squamous cell carcinoma, and the cancer is then usually found in the lungs rather than the head and neck. The district court, however, found that this statement contradicted a study that Dr. Bidanset relied upon in the First Report, which concluded that smoking is a major risk factor for squamous cell carcinoma of the head and neck. Id. The study further concluded that the latency period for developing squamous cell carcinoma was eight years,

rather than decades, as Dr. Bidanset contended. Id. The district court also faulted the Second Report for not accounting for the possibility that decedent's heavy drinking may have caused his squamous cell carcinoma, even though the First Report specifically stated that alcohol is a major risk factor for squamous cell carcinoma. Id.

Regarding the Second Report, the district court held that Dr. Bidanset's oncogene theory failed all of the Daubert factors, as it had not been tested or subjected to peer review, and consequently, there was no known potential error rate. Id. 2002 U.S. Dist. LEXIS 1546 at *13-16. Further, the district court found that Dr. Bidanset's reasons for departing from the mainstream understanding of causation to embrace the oncogene theory were wholly unsatisfactory. Id. 2002 U.S. Dist. LEXIS 1546 at *14-16. Dr. Bidanset could cite to no epidemiological studies pointing to an increased risk of squamous cell carcinoma in those exposed to benzene or PAHs, and he conceded in his deposition that he was unsure whether PAHs conform to the oncogene theory at all. The district court also determined that Dr. Bidanset's conclusion that exposure to diesel fuel contributed to decedent's cancer was made without any basis. Id. 2002 U.S. Dist. LEXIS 1546 at *15.

On the basis of these deficiencies, the district court granted defendants' motion to exclude Dr. Bidanset's expert testimony and opinions. Id. Wills nonetheless argued that, even if such evidence were excluded, the defendants' motion for summary judgment should be denied because, under The Pennsylvania Rule, defendants bore the burden of proof on the issue of causation. The district court declined to apply The

Pennsylvania Rule and refused to shift the burden of proof to defendants. Id. 2002 U.S. Dist. LEXIS 1546 at *16-17. Relying chiefly on this Court's decision in Wilkins v. American Export Isbrandtsen Lines, Inc., 446 F.2d 480 (2d Cir. 1971), in which we declined to invoke the Rule where a seaman died from a heart attack after working more hours than statutorily allowed, the district court held that The Pennsylvania Rule "should not be extended 'beyond the chosen area of ship collisions to embrace Jones Act cases.'" Wills, 2002 U.S. Dist. LEXIS 1546, 2002 WL 140542, at *16 (quoting Wilkins, 446 F.2d at 486).

On Wills's claim for maintenance and cure, the district court found that, in addition to a failure of proof on the issue of causation, Wills had proffered insufficient evidence to establish that decedent's illness manifested itself during his employment with defendants. Id. 2002 U.S. Dist. LEXIS 1546 at *17.

Finding Wills without evidence on the issue of causation, an issue that the district court regarded as essential for her to prevail, the district court provisionally granted summary judgment in favor of defendants. Id. Sensitive to Wills's claim that her case had been stymied by her inability to obtain full discovery, the district court permitted Wills an additional twenty days to submit an affidavit detailing the evidence sought through further discovery and the manner in which such evidence would assist her in proving causation. Id. In response, Wills requested an opportunity to depose all of defendants' operating personnel and review a host of documents pertaining to the design and cargo of defendants' vessels. She also

requested permission to conduct environmental and air quality tests aboard defendants' vessels.

After considering Wills's request, the district court declined to re-open discovery. Wills, 2002 U.S. Dist. LEXIS 1546, 2002 WL 1482624, at *4. According to the district court, Wills did not explain how an opportunity to depose all of defendants' employees would allow her to remedy the deficiencies identified in Dr. Bidanset's testimony. Id. 2002 U.S. Dist. LEXIS 1546 at *1. As to the documentary evidence sought, the district court concluded that defendants either had complied with Wills's requests for such materials or that Wills previously had been given sufficient access to such records. Id. 2002 U.S. Dist. LEXIS 1546 at *4. The district court was also unpersuaded by Wills's requests to conduct air quality tests on defendants' vessels, because it doubted that the results of such tests - conducted more than seven years after decedent's death - would be probative on the issue of his exposure to toxins. Id. For the reasons stated in its prior order and opinion, the district court granted summary judgment to defendants on all claims.

Wills timely filed this appeal.

DISCUSSION

We must first determine whether the district court correctly held that Wills bears the burden of proof on the issue of causation and that The Pennsylvania Rule was inapplicable to her claims. Because we answer those questions affirmatively, we then determine whether the court was correct in finding that Wills did not satisfy her burden to prove causation and in

granting summary judgment to defendants on that basis. We also answer those questions affirmatively and hold that: (1) expert testimony on the issue of causation is necessary in Jones Act cases where a lay juror could not be expected to intuit the causal relationship between the acts in question and the injury; (2) such expert testimony must satisfy the Daubert standards of reliability to be admissible under Rule 702; (3) the district court did not abuse its discretion in concluding that Wills's proffered expert testimony either did not meet those standards or was untimely; and (4) the district court's stay of discovery pending a determination of the admissibility of Wills's expert's testimony was not an abuse of discretion.

Lastly, because Wills has not established that decedent's illness manifested itself while he was in defendants' employ, or that decedent's illness was causally related to exposure to toxic emissions while aboard defendants' ships, her claim for maintenance and cure also fails.

I. Standards of Review

We review the district court's grant of summary judgment de novo. See Lombard v. Booz-Allen & Hamilton, Inc., 280 F.3d 209, 214 (2d Cir. 2002). Summary judgment is appropriate where there are no genuine issues of material fact and the moving party is entitled to judgment as a matter of law. Fed. R. Civ. P. 56; Oneida Indian Nation v. City of Sherrill, 337 F.3d 139, 152-53 (2d Cir. 2003). When there are no disputed issues of material fact, "our task is to determine whether the district court correctly applied the law."

Mario v. P & C Food Mkts., Inc., 313 F.3d 758, 763 (2d Cir. 2002) (internal quotation marks omitted).

We review a district court's decision to exclude expert testimony for abuse of discretion. Kumho Tire Co. v. Carmichael, 526 U.S. 137, 152, 143 L. Ed. 2d 238, 119 S. Ct. 1167 (1999). The exclusion of a proposed expert witness will not constitute an abuse of discretion unless it is "manifestly erroneous." Amorgianos v. AMTRAK, 303 F.3d 256, 265 (2d Cir. 2002) (internal quotation marks omitted). We have held that "the abuse of discretion standard applies as much to the trial court's decisions about how to determine reliability as to its ultimate conclusion." Id. (emphasis in original) (internal quotation marks omitted). Accordingly, "the district court has broad discretion in determining what method is appropriate for evaluating [the] reliability [of proposed expert evidence] under the circumstances of each case." Id.

Recognizing the district court's broad discretion to direct and manage the pre-trial discovery process, we also review a district court's discovery rulings for abuse of discretion. Am. Sav. Bank, FSB v. UBS PaineWebber, Inc. (In re Fitch, Inc.), 330 F.3d 104, 108 (2d Cir. 2003).

II. Application of The Pennsylvania Rule

"Because of their status as wards of the admiralty, [seamen] are by the peculiarity of their lives liable to sudden sickness from change of climate, exposure to perils, and exhausting labour." O'Hara v. Weeks Marine, Inc., 294 F.3d 55, 62 (2d Cir. 2002) (internal quotation marks omitted); see Chandris, Inc. v. Latsis,

515 U.S. 347, 354-55, 132 L. Ed. 2d 314, 115 S. Ct. 2172 (1995). The Jones Act, 46 App. U.S.C. § 688, provides seamen with special statutory protections in the area of personal injury suits: "Any seaman who shall suffer personal injury in the course of his employment may" bring a cause of action against his employer. Id. at § 688(a). The Act therefore "places a . . . duty on the [shipowner] to provide a reasonably safe workplace." Oxley v. City of New York, 923 F.2d 22, 25 (2d Cir. 1991). Wills argues that defendants breached this duty by exposing her husband to carcinogenic chemicals. n3

Wills contends that defendants' motion for summary judgment was improperly granted because, upon showing that defendants breached their regulatory obligation to protect decedent from exposure to toxins, The Pennsylvania Rule applies and relieves her of the burden of proving causation altogether. The Pennsylvania Rule, an oddity of admiralty law, shifts the burden of proving causation from plaintiffs to defendants to "show[] not merely that [their] fault might not have been one of the causes [of the injury], or that it probably was not, but that it could not have been." The Pennsylvania, 86 U.S. (19 Wall.) 125, 136, 19 Wall. 125, 22 L. Ed. 148. Wills asserts that she can prove that defendants violated various coast guard regulations requiring shipowners to monitor benzene emissions, see 46 C.F.R. §§ 197.505, 197.515, 197.540, n4 and that proof of such violations warrants application of The Pennsylvania Rule's presumption that these violations caused her husband's cancer.

By shifting the burden of proof to establish causation, The Pennsylvania Rule creates a "drastic and unusual presumption" - albeit a rebuttable one - against the

shipowner who has violated his or her legal duties. Dir. Gen. of India Supply Mission v. S.S. Maru, 459 F.2d 1370, 1375 (2d Cir. 1972) (quoting G. Gilmore & C. Black, The Law of Admiralty § 7-5, at 404 (1957)). Nevertheless, such a presumption is appropriate in cases where, in light of "wide experience in maritime navigation," "the logical probability" is "that [the] fault of the ship is the cause" of the disaster. Wilkins v. Am. Exp. Isbrandtsen Lines, Inc., 446 F.2d 480, 485 (2d Cir. 1971).

Collision cases, such as the case that gave the Rule its moniker, most clearly illustrate this principle. Because a collision "is rare in which there is not at least some arguable reason for regarding both vessels at fault," id. (internal quotations marks and citation omitted), it is logical to attribute fault to "a ship [that] at the time of a collision is in actual violation of a statutory rule intended to prevent collisions." n5 The Pennsylvania, 86 U.S. (19 Wall.) at 136 (imposing presumption against sailboat, which, lacking a required foghorn, collided with a speeding steamer). Thus under the Rule, proof that a maritime safety rule was violated creates a presumption that the violation led to the collision, such that the complaining party is relieved of its obligation to show causation, unless the derelict shipowner can prove that the violation was not the cause of the collision.

Wills correctly notes that application of The Pennsylvania Rule has not been limited to cases involving collisions. See, e.g., Complaint of Tug Helen B. Moran, Inc., 560 F.2d 527, 529 (2d Cir. 1977) (applying the Rule in the context of allision n6); The Aakre, 122 F.2d 469, 474-75 (2d Cir. 1941) (applying the

Rule in the context of ship stranding). Nevertheless, we have been cautious not to extend the Rule's application in ways that would unmoor it from its animating principles. Thus, for example, we have held that application of The Pennsylvania Rule is "limited to the violation of a statute intended to prevent the catastrophe which actually transpired." India Supply Mission, 459 F.2d at 1375. Accordingly, we have applied the Rule against a ship overloaded in violation of the Load Line Act, 46 App. U.S.C. §§ 85(b) and (c), that sank at sea. See Petition of Long, 439 F.2d 109, 113 (2d Cir. 1971). We declined, however, to apply the Rule against an unlawfully overloaded ship that became stranded in shallow water. India Supply Mission, 459 F.2d at 1374-75. In distinguishing the two scenarios, we noted that Congress's "prime motivation" in enacting the Load Line Act was to prevent loss of life due to overloaded vessels sinking. Id. at 1375-76. Absent such a limiting principle, "every violation of every statute would call into play the Pennsylvania rule irrespective of the purpose of the statute and the danger which it was intended to prevent." Id. at 1376.

Wills argues that this limitation is satisfied here, because defendants are alleged to have violated coast guard regulations that were enacted for the express purpose of preventing seamen from developing cancer from exposure to toxic emissions while at sea. See 56 Fed. Reg. 52122-01 (Oct. 17, 1991) (stating that coast guard regulation, 46 C.F.R. § 197, "incorporated the lower benzene exposure levels adopted by [OSHA]" which is "expected to result in a 90% lowering of leukemia deaths associated with the inhalation of benzene vapors"). Even assuming arguendo that Wills is correct that her husband's cancer was within the

scope of harms that these coast guard regulations were intended to prevent, we agree with the district court that the circumstances of this case do not warrant application of The Pennsylvania Rule.

In addition to requiring a nexus between the injury and the purpose of the legal obligation that was breached, our cases hold that The Pennsylvania Rule will not create a presumption that the law's violation caused a calamity unless common sense or the realities of admiralty prompt that conclusion. In The Mabel, 35 F.2d 731 (2d Cir. 1929) (per curiam), for example, we refused to impose The Pennsylvania Rule against an anchored ship that was struck by a barge at night, despite the barge owner's argument that the collision could have been avoided had the anchored ship complied with its legal obligation to hang cautionary lights at a sufficient distance from one another. Id. at 732. While "all things are indeed possible," we observed that "in applying [The Pennsylvania Rule] we are limited to the reasonable probabilities." Id. Finding it improbable that the anchored ship's failure to comply with the regulation was the cause of the collision, the bargeowner's application to invoke The Pennsylvania Rule was denied.

Over fifty years later, in Wilkins, similar reasoning led us to reject application of The Pennsylvania Rule in a Jones Act case. There, a seaman suffered a fatal heart attack after being required to work strenuous amounts of overtime. The seaman's estate sued the seaman's employer under the Jones Act, arguing that by forcing the seaman to work so hard, the employer was responsible for the seaman's death. Id. at 481. The estate claimed that The Pennsylvania Rule was

applicable because the employer violated a safety statute that limited seaman overtime. Id. at 485. While recognizing that the seaman's overtime work "was not so devoid of probative value as to forbid an inference that it caused his heart attack," we also found that the nexus between the violation of the statute and the seaman's heart attack was not so self-evident as to warrant the presumption that violation of the overtime statute resulted in the seaman's death. Id. at 484-85. Accordingly, we held that The Pennsylvania Rule does not apply where proof that the legal obligation was breached does not lead "naturally and logically" to the conclusion that the breach caused the injury. Id. at 485.

Wills contends that it is entirely possible that decedent would not have developed squamous cell carcinoma if defendants had complied with their obligations to monitor benzene. We cannot say, however, that it is reasonably probable that defendants' non-compliance and decedent's cancer were causally related. See The Mabel, 35 F.2d at 732. No reference to our "common experience" in admiralty, or to authorities with "wide experience in maritime navigation," supports the conclusion that the failure to monitor benzene levels led "naturally and logically" to decedent's fatal cancer. See Wilkins, 446 F.2d at 485. In this regard, we agree with the Third Circuit that The Pennsylvania Rule "was [not] intended to increase the likelihood of liability no matter how remote and unrelated an injury to a statutory [or regulatory] violation." In re Complaint of Nautilus Motor Tanker Co., 85 F.3d 105, 114 (3d Cir. 1996).

Although Wills relies heavily on our decision in In re Seaboard Shipping Corp., 449 F.2d 132, 136 (2d Cir.

1971), our decision to apply The Pennsylvania Rule in that case does not prompt us to apply the Rule here. In re Seaboard involved a controversy between a barge owner and a tugboat owner that arose after two bargemen drowned when the tugboat and the barge it was hauling were caught in a violent storm. Id. at 133. Together, the owners of the tugboat and the barge advanced the money to settle claims brought by the bargemen's survivors; thereafter, they sued one another for exoneration. Id. Although the barge suffered from an inoperative radio and a leaky lifeboat, the barge owner nonetheless argued that he was not partially liable because the tugboat, which negligently steered both vessels into the path of the storm, had not proven that the absence of the barge's required safety features caused the bargemen to drown. Id. at 136. In applying The Pennsylvania Rule, we held that the lack of proof disadvantaged the barge and the parties were jointly liable. Id. at 139. The factual circumstances of that case, however, are wholly distinguishable from the instant case. In In re Seaboard, the facts suggested that the "tragedy would not have occurred" absent the barge's statutory violations which left it "mute and helpless." Id. at 136, 138. Here, there is no indication that decedent's cancer would not have occurred if defendants had complied with coast guard regulations.

Wills, however, argues that application of The Pennsylvania Rule in this case is necessary to give effect to the purposes of the Jones Act to compel defendants' compliance with safety obligations. The plaintiff in Wilkins raised a similar argument. Nevertheless, we were "not persuaded that there are broad considerations of policy which require that we extend the admiralty rule of The Pennsylvania . . . to

embrace Jones Act cases." Wilkins, 446 F.2d at 486; see also Pierro v. Carnegie-Illinois Steel Corp., 186 F.2d 75, 78 (3d Cir. 1950) (finding application of The Pennsylvania Rule inappropriate in Jones Act claim for death of overworked seaman). We are aware that in the years since we decided Wilkins, some courts have applied The Pennsylvania Rule in Jones Act cases. See Reyes v. Vantage S.S. Co., 609 F.2d 140, 145-46 (5th Cir. 1980); Marine Solution Servs., Inc. v. Horton, 70 P.3d 393, 407 (Alaska 2003). The facts of the instant case, however, present no compelling reason to depart from our prior precedents. Even if we were persuaded that The Pennsylvania Rule should be applied in some Jones Act cases, we would still decline to apply the rule in cases where, as here, it cannot be said with confidence that the plaintiff's injury resulted from defendants' actions.

III. Wills's Jones Act Claims

Having determined that Wills, rather than defendants, bears the burden of proving causation, we turn to whether the district court was correct in holding that Wills failed to carry her burden and that summary judgment in favor of defendants was warranted. In considering defendants' motion for summary judgment, the district court first determined that Wills was required to proffer expert testimony on the issue of causation. After ruling that Wills's proffered expert testimony on the issue of causation was inadmissible, the district court granted defendants' motion for summary judgment because Wills had not proffered evidence from which a reasonable jury could conclude that decedent's cancer was even partially caused by his alleged exposure to toxins while aboard defendants'

ships. Wills,2002 U.S. Dist. LEXIS 1546, 2002 WL 140542, at *17.

On appeal, Wills reminds us that as a Jones Act plaintiff, she "shoulders a lighter burden [for establishing negligence] than [her] counterpart on land would carry." McMillan v. Marine Sulphur Shipping Corp., 607 F.2d 1034, 1039 (1979) (internal quotation marks and citation omitted). She argues that the district court, in excluding her proposed expert testimony on the issue of causation, failed to appreciate her reduced burden to prove causation. Wills claims that, by granting summary judgment in favor of defendants on the ground that she failed to proffer admissible evidence on the issue of causation, the district court's undermined "the right of the jury to pass upon the question of fault and causation," a right that in Jones Act cases "must be most liberally viewed." Oxley, 923 F.2d at 25 (internal quotation marks omitted). In reviewing Wills's claims, we consider whether: (1) expert testimony was required to prove causation; (2) under the Jones Act, the standards for the admissibility of expert testimony apply in full force; (3) the district court abused its discretion in excluding Wills's proposed expert testimony; and (4) in the absence of admissible evidence on the issue of causation, summary judgment was properly granted to defendants. Answering these questions affirmatively, we agree with the district court's conclusion that Wills failed to satisfy her burden to prove causation and that summary judgment in favor of defendants was warranted.

A. Expert Testimony Necessary to Prove Causation

Wills argues that summary judgment was improperly granted because expert testimony was not necessary to satisfy her burden to prove causation. It is well settled that expert testimony is unnecessary in cases where jurors "are as capable of comprehending the primary facts and of drawing correct conclusions from them as are witnesses possessed of special or peculiar training." Salem v. United States Lines Co., 370 U.S. 31, 35, 8 L. Ed. 2d 313, 82 S. Ct. 1119 (1962) (internal quotation marks omitted). Where, however, the nexus between the injury and the alleged cause would not be obvious to the lay juror, "expert evidence is often required to establish the causal connection between the accident and some item of physical or mental injury." Moody v. Maine Cent. R.R. Co., 823 F.2d 693, 695 (1st Cir. 1987). In a case such as this, where an injury has multiple potential etiologies, expert testimony is necessary to establish causation, even in view of plaintiff's reduced burden to prove causation. See Claar v. Burlington N. R.R. Co., 29 F.3d 499, 503-04 (9th Cir. 1994) (affirming district court's grant of summary judgment following plaintiff's failure to proffer admissible expert testimony on the issue of causation in a case brought under the Federal Employers' Liability Act); Moody, 823 F.2d at 695 (affirming the district court's grant of summary judgment to defendants when plaintiff failed to proffer admissible expert testimony linking workplace harassment to emotional trauma). Indeed, this court has never held that a Jones Act plaintiff can survive summary judgment in a toxic tort case without admissible expert testimony on the issue of causation.

Wills argues, however, that our holding in Ulfik v. Metro-North Commuter R.R., 77 F.3d 54 (2d Cir. 1996) stands for the proposition that a Jones Act or FELA plaintiff may survive summary judgment, even in the absence of expert testimony on the issue of causation. In Ulfik, the plaintiff brought a FELA action against defendants for an injury suffered as a result of a fall following plaintiff's exposure to paint fumes. Id. at 56-57. We concluded that summary judgment was not warranted because no expert testimony was necessary to establish the causal nexus between inhaling paint fumes and the dizziness that allegedly led to plaintiff's fall. Id. at 59-60. This case is wholly distinguishable from Ulfik in that, here, we cannot rely on circumstantial, lay evidence alone to create a genuine issue of material fact as to whether toxins emitted from defendants' vessels caused decedent's cancer. As we have noted, the causal link between exposure to toxins and other behavior and squamous cell carcinoma is sufficiently beyond the knowledge of the lay juror that expert testimony is required to establish causation. See Claar, 29 F.3d at 504 (finding that expert testimony was required to establish the causal nexus between plaintiffs' injuries and their exposure to harmful chemicals). Accordingly, we agree with the district court that Wills was required to proffer expert testimony on the issue of causation, and, in the absence of such testimony, that the district court properly granted defendants' motion for summary judgment.

B. Daubert's Standards Apply in the Context of the Jones Act

Wills also contends that even if expert testimony on the issue of causation is required to survive summary

judgment, she proffered admissible expert testimony, which the district court improperly excluded. Specifically, Wills maintains that because her burden of proof on the issue of causation is relaxed under the Jones Act, the standards of reliability and credibility used to determine admissibility of expert testimony under Rule 702 and Daubert are also relaxed. To support this contention, Wills relies on Hines v. Conrail, 926 F.2d 262 (3d Cir. 1991). In Hines, the plaintiff brought suit against his employer under the Federal Employers' Liability Act ("FELA"), 45 U.S.C. §§ 51-60, a statute, which, like the Jones Act, provides plaintiffs with a reduced burden of proof to establish causation. n7 In deciding plaintiff's claims, the Third Circuit, in a decision that predates Daubert, stated that "the standard [of proof] under FELA can significantly influence a determination of the admissibility of " [expert] testimony." Hines, 926 F.2d at 269. For the reasons discussed, we find this argument unavailing and hold that Daubert's standards for determining the admissibility of expert testimony apply regardless of whether the plaintiff's burden to prove causation is reduced.

Although Wills correctly characterizes her burden of proof to establish causation under the Jones Act, she fails to appreciate that the standards for determining the reliability and credibility of expert testimony are not altered merely because the burden of proof is relaxed. As both the Sixth and Ninth Circuits observed in the context of FELA claims, "the standard of causation . . . and the standards for admission of expert testimony under the Federal Rules of Evidence are distinct issues and do not affect one another." Claar, 29 F.3d at 503; see also Taylor v. CONRAIL, 114 F.3d

1189 (Table), 1997 WL 321142, at *6-7 (6th Cir. 1997) (quoting Claar, 29 F.3d at 503, and noting that "it is well established that the [admissibility of expert testimony] is controlled - even in cases arising under FELA[, which, like the Jones Act, has a relaxed burden of proof to show causation] - by the Federal Rules of Evidence and the seminal case of Daubert") (internal citation omitted). We agree that even where, as here, plaintiff faces a relaxed burden of proof with regard to causation, the district court's admission of expert testimony is nonetheless governed by the strictures of Rule 702 and Daubert. n8

C. The District Court's Exclusion of Dr. Bidanset's Testimony Was Not an Abuse of Discretion

Wills contends that the district court's exclusion of Dr. Bidanset's testimony was an abuse of discretion. First, she maintains that the district court's concerns that Dr. Bidanset failed to establish that exposure to carcinogenic substances while aboard defendants' ships was the specific cause of decedent's cancer were misplaced. Under the Jones Act, she claims, a plaintiff need not demonstrate that defendant's action caused the injury, but rather a plaintiff need show only that defendant's actions were one of perhaps many causes of the injury. Wills's arguments miss the point of the district court's conclusions.

Rule 702 of the Federal Rules of Evidence, which governs the admissibility of scientific or technical expert testimony, provides:

If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence

or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.

In Daubert, the Supreme Court made clear that the district court has a "gatekeeping" function under Rule 702, and is charged with "the task of ensuring that an expert's testimony both rests on a reliable foundation and is relevant to the task at hand." 509 U.S. at 597. In fulfilling this role, the district court must consider both the reliability and relevance of the proffered testimony. In gauging reliability, the district court should consider the indicia of reliability identified in Rule 702, namely, (1) that the testimony is grounded on "sufficient facts or data;" (2) that the testimony "is the product of reliable principles and methods;" and (3) that "the witness has applied the principles and methods reliably to the facts of the case." Fed. R. Evid. 702. In so doing, the district court must "make certain that an expert, whether basing testimony upon professional studies or personal experience, employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field." Kumho Tire Co., 526 U.S. at 152.

Although Rule 702 sets forth specific criteria for the district court's consideration, these criteria are not exhaustive. The district court may consider a number of other factors in determining the reliability of the proffered testimony, including: (1) whether a theory or

technique has been or can be tested; (2) "whether the theory or technique has been subjected to peer review and publication;" (3) "the technique's known or potential rate of error" and "the existence and maintenance of standards controlling the technique's operation;" and (4) whether a particular technique or theory has gained general acceptance in the relevant scientific community. See Daubert, 509 U.S. at 593-94. In the instant case, the district court rejected Dr. Bidanset's testimony on the grounds that it failed to comport with any of the relevant Daubert factors for reliability of expert testimony and granted summary judgment in favor of defendants because Wills failed to proffer admissible evidence of causation.

Wills first challenges the district court's exclusion of Dr. Bidanset's testimony on the grounds that it failed to quantify the dosage of the toxin to which decedent was allegedly exposed. Wills maintains that the court misapprehended Dr. Bidanset's "oncogene theory" of causation and excluded the theory merely because it was not generally accepted in the scientific community. She further argues that the district court's requirement that Dr. Bidanset quantify dosage was unfair, as, she contends, defendants failed to monitor properly the concentration of toxins on ships upon which decedent worked, and she was not permitted sufficient discovery to determine the dosage amount. We find no abuse of discretion.

Dr. Bidanset's oncogene theory of causation, as the district court noted in its comprehensive and thorough discussion, see Wills, 2002 U.S. Dist. LEXIS 1546, 2002 WL 140542, at *13-15, posits that decedent's cancer was caused by a single exposure - regardless of the quantity

of the dosage - of toxic chemicals such as benzene and PAHs. Although the district court observed that the oncogene theory was not generally accepted in the scientific community, id. 2002 U.S. Dist. LEXIS 1546 at *13, this factor was not determinative in the court's decision to exclude Dr. Bidanset's testimony. Instead, the district court considered the oncogene theory in light of Daubert's four factors for reliability and concluded that the oncogene theory failed to satisfy any of the relevant factors. Id. 2002 U.S. Dist. LEXIS 1546 at *13-14. The district court determined that there was no evidence that the theory had been tested or subjected to peer review. Id. 2002 U.S. Dist. LEXIS 1546 at *13. Indeed, Dr. Bidanset admitted that the theory was the product of his own "background experience and reading," rather than scientific testing or peer review. Bidanset Dep. at 67. Further, the court found that Dr. Bidanset did not state a known or potential error rate for the theory. Id. Finally, the district court determined that the "dose-response relationship" was the more generally accepted theory of causation in the scientific community, and that the oncogene theory, as Bidanset conceded in his deposition testimony, was controversial. Id. 2002 U.S. Dist. LEXIS 1546 at *14. The district court's assessment was entirely appropriate for discharging its duty to determine whether the "reasoning or methodology underlying the [proposed expert] testimony is scientifically valid." Daubert, 509 U.S. at 592-93.

Dr. Bidanset's proposed expert testimony on the issue of dosage amount also relied on the affidavit testimony of Mark Miller, a seaman who worked on the same ships as decedent for a period of five months in 1995. In his affidavit, Miller averred that he and other seamen had

suffered from various ailments that could be attributed to harmful exposure to toxins. Miller also referred to conversations that he had with decedent regarding decedent's symptoms of exposure to dangerous toxins. Based on these observations, Miller opined that decedent was exposed to a harmful dose of toxins while aboard defendants' ships. Dr. Bidanset relied on Miller's testimony in concluding that exposure to toxins while aboard defendants' ships was the cause of decedent's squamous cell carcinoma. The district court, however, found Miller's testimony insufficient to support expert testimony. Id. 2002 U.S. Dist. LEXIS 1546 at *11.

We agree with the district court that Miller's testimony was insufficient to establish that decedent had been exposed to a harmful amount of toxins or that such exposure caused his cancer. First, Miller, a seaman, lacked the "practical experience and necessary academic training" to analyze and quantify the dosage of the toxins emitted aboard defendants' ships. See McCullock v. H.B. Fuller Co., 61 F.3d 1038, 1042-43 (2d Cir. 1995) (affirming district court's admission of chemical engineer's expert testimony linking plaintiff's injury to exposure to toxic fumes). Absent some technical or professional expertise in detecting and quantifying toxic emissions, Miller's testimony was insufficient to establish dosage amount. Moreover, during decedent's ten-year career at sea, he served aboard the same ship as Miller only for a period of five months - and then in different areas of the ship and in different capacities. There can be no question that lay opinions of this sort provide an insufficient basis for an expert to extrapolate the amount of toxins to which decedent was exposed.

In addition to the fact that it failed to satisfy any of the Daubert factors for reliability, Dr. Bidanset's proposed expert testimony suffered from another fatal flaw. Although Dr. Bidanset conceded that cigarette smoking and alcohol consumption were major risk factors for the development of squamous cell carcinoma, he failed to account for these variables in concluding that decedent's cancer was caused by exposure to toxic chemicals such as benzene and PAHs. See Amorgianos, 303 F.3d at 265 (noting that expert testimony may be excluded where "the flaw is large enough that the expert lacks good grounds for his or her conclusions") (internal quotation marks omitted). We agree with the district court that Dr. Bidanset's failure to account for decedent's smoking habit and alcohol consumption as possible causes of decedent's squamous cell carcinoma, strongly indicated that Dr. Bidanset's conclusions were not grounded in reliable scientific methods, as required by Daubert.

Absent admissible expert testimony on the issue of causation, Wills was unable to sustain her burden to prove causation. It is well established that summary judgment is warranted where there is an absence of evidence that could "'justify with reason the conclusion that employer negligence played any part, even the slightest, in producing the injury.'" Diebold v. Moore McCormack Bulk Transp. Lines, Inc., 805 F.2d 55, 57-58 (2d Cir. 1986) (emphasis in original) (quoting Rogers v. Missouri P. R. Co., 352 U.S. 500, 506, 1 L. Ed. 2d 493, 77 S. Ct. 443 (1957)); see also Quam v. Mobil Oil Corp., 599 F.2d 42, 43 (2d Cir. 1979) (affirming judgment as a matter of law against Jones Act plaintiff where "there was simply no evidence of causation"). Accordingly,

defendants' motion for summary judgment was properly granted.

IV. The District Court's Discovery Rulings

On appeal, Wills also challenges several of the district court's discovery rulings on the grounds that the rulings prevented her from obtaining the information necessary to sustain her burden to establish causation. In particular, she argues that the district court's exclusion of two proposed expert witnesses as untimely and the court's stay of discovery were improper. For the reasons that follow, we disagree.

A. The District Court's Exclusion of Haas and Neugut

In an order dated February 26, 2001, the district court granted defendants' application to preclude as untimely the expert opinions of Dr. Alfred I. Neugut, an epidemiologist, and Mr. Paul Haas, an industrial hygienist. Wills subsequently petitioned the court to reconsider its decision. The district court denied plaintiff's request with prejudice. Despite Wills's arguments to the contrary, these exclusions cannot be characterized as abuses of discretion.

On October 14, 1999, the district court ordered Wills to disclose, pursuant to Fed. R. Civ. P. 26(a)(2)(A) and (B), all potential experts no later than November 1, 1999. On November 19, 1999, Wills produced Dr. Bidanset's expert report, but did not produce expert reports for either Haas or Dr. Neugut. In a letter dated December 6, 2000, Wills informed the court for the first time that she intended to rely upon the opinion of Haas to meet

her burden to prove causation; however, she did not produce Haas's report at that time. In February 2001, after defendants had filed their motion for summary judgment, Wills identified Dr. Neugut as an expert for the first time. She produced expert reports for both proposed experts with her response to defendants' motion for summary judgment.

As we noted earlier, the district court has "wide discretion" to direct the discovery process. See Am. Sav. Bank, FSB v. UBS PaineWebber, Inc. (In re Fitch, Inc.), 330 F.3d 104, 108 (internal quotation marks omitted). A district court abuses its discretion "when the action taken was improvident and affected the substantial rights of the parties." Goetz v. Crosson, 41 F.3d 800, 805 (2d Cir. 1994) (internal quotation marks omitted). Here, the district court provided Wills ample opportunity to identify experts and submit expert reports in a timely fashion, as directed by Fed. R. Civ. P. 26(a)(2)(B). Wills, however, did not avail herself of these opportunities and instead, chose to identify experts one at a time, in a manner that appeared intended to delay completion of the pre-trial process.

Moreover, it is unclear whether the substance of the proposed experts' testimony would be sufficient to allow Wills to survive summary judgment. Haas's proposed expert testimony asserted that defendants did not comply with their obligations to monitor and perform health maintenance as required by OSHA regulations. Dr. Neugut relied upon a number of epidemiological studies that purportedly established a relationship between the toxins to which decedent was allegedly exposed and a variety of cancers. Although both experts could correct a particular deficit identified

by the district court in its review of Dr. Bidanset's expert testimony, neither expert fully satisfied all of the issues that concerned the district court in determining that Wills had failed to satisfy her burden to prove causation. Accordingly, because the district court's exclusion of the experts' testimony was neither improvident nor affected plaintiff's substantial rights, there was no abuse of discretion.

B. The District Court's Stay of Discovery Was Not Improper

In December 1999, the district court stayed Wills's request to conduct depositions of a number of defendant employees and to obtain various documents, pending resolution of defendants' motion to exclude Dr. Bidanset's expert testimony. Shortly thereafter, in January 2000, the district court lifted the stay only for the purpose of allowing defendants to provide Wills copies of defendants' emissions monitoring reports conducted pursuant to OSHA and coast guard regulations, and any medical records pertaining to decedent. Wills, 2000 U.S. Dist. LEXIS 319, 2000 WL 42201, at *3. The district court, however, determined that the December 6, 1999 stay would remain in effect with regard to Wills's other discovery requests until the court determined the admissibility of Dr. Bidanset's proposed expert testimony. Id.

On appeal, Wills argues that the stay was improper because it resulted in an incomplete record and prevented Wills's additional expert witnesses from completing and submitting their expert reports in a timely fashion. We find this argument unavailing.

It is axiomatic that the trial court enjoys wide discretion in its handling of pre-trial discovery. In re Fitch, 330 F.3d at 108. We will reverse a district court's discovery ruling only upon a clear showing of an abuse of discretion. Id. In the instant case, the district court's order staying discovery pending a decision on the admissibility of Dr. Bidanset's expert testimony was well within the scope of its discretion. The stay was limited to Wills's request to conduct depositions of a number of defendants' employees and document demands for voluminous records relating to many of defendants' vessels. Further, the stay was not indefinite, but rather was effective until the district court determined the issue of Dr. Bidanset's admissibility as an expert witness under Rule 702. Finally, following the exclusion of Dr. Bidanset as an expert, the district court permitted Wills an opportunity to identify what discovery she had been prevented from obtaining and why such discovery "would lead the Court to a different conclusion on [the issue of] causation." Wills, 2002 U.S. Dist. LEXIS 1546, 2002 WL 140542, at *17. In no way can such a stay be characterized as an abuse of discretion. In a complex toxic tort suit, the district court properly limited discovery to those requests tailored to provide evidence of the salient issue - causation. Moreover, given the district court's obligation to manage effectively pre-trial proceedings, it was not improper to limit plaintiff's discovery requests where there were concerns that such requests were intended only to "create a causation theory unsupported by current medical science or to harass defendants into an offer of settlement." Wills, 2002 U.S. Dist. LEXIS 12217, 2002 WL 1482624, at *3.

V. Wills's Claim for Maintenance and Cure

In her complaint, Wills also alleged several claims under general maritime law. Of these general maritime claims, Wills has presented only her claim for maintenance and cure on appeal; thus, her remaining maritime claims are waived. See LoSacco v. City of Middleton, 71 F.3d 88, 92-93 (2d Cir. 1995) (noting that arguments not raised on appeal are waived). With regard to her claim for maintenance and cure, Wills claims that although decedent's illness was not diagnosed while he was employed by defendants, his illness manifested itself during his employment. She argues that defendants are obligated to provide maintenance and cure, and that the district court improperly granted summary judgment in favor of defendants on this issue. We disagree.

The general maritime law of the United States provides seamen who have become ill or injured while in a ship's service with the right to maintenance and cure. Ammar v. United States, 342 F.3d 133, 142 (2d Cir. 2003) (collecting cases). "Maintenance" refers to a shipowner's duty to provide food and lodging to an ill or injured seaman, comparable to the kind and quality received aboard ship, id., while "cure" refers to "a shipowner's obligation to provide [such] medical care to such seamen" during the period of recovery or rehabilitation from the illness or injury to the point of maximum recovery, Calo v. Ocean Ships, Inc., 57 F.3d 159, 162 (2d Cir. 1995). Both obligations attach irrespective of shipowner negligence and regardless of whether the illness or injury was job-related. Ammar, 342 F.3d at 142 (discussing maintenance); Calo, 57 F.3d at 162 (discussing cure).

Ordinarily, the no-fault obligation of shipowners to provide maintenance and cure extends only to a seaman who becomes ill or injured while "in the service of the ship." See Aguilar v. Standard Oil Co., 318 U.S. 724, 731-32, 87 L. Ed. 1107, 63 S. Ct. 930 (1943) (internal quotation marks omitted). A seaman whose illness or injury manifests after conclusion of his or her employment with the shipowner is generally not entitled to recover for maintenance and cure absent "convincing proof of causal connection" between the injury or illness and the seaman's service. Brahms v. Moore-McCormack Lines, Inc., 133 F. Supp. 283, 286 (S.D.N.Y. 1955) (citing Miller v. Lykes Bros-Ripley S.S. Co., 98 F.2d 185, 186 (5th Cir. 1938); Capurro v. The All America, 106 F. Supp. 693, 694 (E.D.N.Y. 1952)).

To support her contention that decedent's illness manifested itself during his employment aboard defendants' ships, Wills refers to the affidavit of Mark Miller, who testified that "decedent complained to me on several occasions of symptoms he was experiencing while working aboard [defendants' ship] in 1995." As we have noted, Miller, a fellow seaman, lacks the medical training or expertise necessary to conclude reliably that decedent's squamous cell carcinoma presented itself while decedent was employed by defendants or was caused by exposure to toxic emissions while in defendants' employ.

Wills further argues that even if decedent's illness manifested itself following the conclusion of his employment with defendants, defendants are nonetheless obligated to pay maintenance and cure because decedent's condition was caused by exposure to toxic emissions while aboard defendants' ships. Again,

we disagree. As has been discussed elsewhere in this opinion, Wills has not established that decedent's illness was caused by exposure to toxic emissions while aboard defendants' ships. Accordingly, this claim was properly dismissed on summary judgment.

CONCLUSION

Affirming the district court's grant of summary judgment to defendants, we conclude that the district court did not abuse its discretion when it stayed discovery or when it excluded Wills's proffered expert testimony as scientifically unreliable or untimely. We also conclude that the district court did not err in declining to apply The Pennsylvania Rule to Wills's claims. Because Wills lacked the required expert testimony or evidence on the issue of causation, the district court properly granted summary judgment on Wills's Jones Act claim. Finally, Wills was not entitled to recover on her maritime claim for maintenance and cure.

Footnotes

* The Honorable Fred I. Parker, who was a member of the panel, died following argument. This appeal is being decided by the remaining two members of the panel, who are in agreement. See 2d Cir. R. § 0.14(b).

n1 Wills's complaint also asserted a products liability claim and claims on behalf of a putative class of seamen who developed cancer after being exposed to toxins aboard defendants' vessels. The district court dismissed Wills's products liability claim with prejudice after Wills expressly waived it. (Order of June 14, 1999). The

district court also dismissed Wills's class allegations after she failed to comply with a court order to submit a class action affidavit as required by Fed. R. Civ. P. 23. See Wills v. Amerada Hess Corp., 1999 U.S. Dist. LEXIS 10651, No. 98 Civ. 7126 (RPP), 1999 WL 500142, at *2 (S.D.N.Y. July 15, 1999). Neither of these orders is before us on appeal.

n2 On January 14, 2000, the court lifted the stay in order to compel defendants to comply with an earlier discovery order and to provide plaintiff with defendants' records of emissions monitoring. Wills v. Amerada Hess Corp., 2002 U.S. Dist. LEXIS 12217, No. 98 CIV. 7126 (RPP), 2002 WL 1482624, at *3 (S.D.N.Y. July 9, 2002).

n3 In her complaint, Wills alleged that defendants breached their duty to exercise due care and diligence by failing to provide decedent a reasonably safe place to work. For purposes of this appeal, we assume these issues but do not reach them in determining the case.

n4 Wills also argues that she is entitled to imposition of The Pennsylvania Rule because the defendants violated OSHA regulations governing the permissible levels of toxic emissions aboard their vessels. See 29 C.F.R. §§ 1910.1000, 1910.1025, 1926.55. As Wills's counsel acknowledged at oral argument, however, we have previously held that a shipowner's violation of OSHA regulations is insufficient to trigger application of The Pennsylvania Rule. See Jones v. Spentonbush-Red Star Co., 155 F.3d 587, 594-96 (2d Cir. 1998) (finding absence of congressional intent in enacting the Occupational Safety and Health Act to shift the burden of proof to shipowner found to be in violation of OSHA regulation).

n5 See also Pierro v. Carnegie-Illinois Steel Corp., 186 F.2d 75, 78 (3rd Cir. 1950) (describing The Pennsylvania Rule as the "product of a philosophy peculiar to United States admiralty law, that disasters are likely to occur when statutes passed for the express purpose of promoting safety in navigation are violated").

n6 In the maritime context, "allision" refers to the running of one ship upon another ship that is stationary. See Webster's Third New International Dictionary 56 (1986).

n7 The Jones Act incorporates FELA by reference. Under both statutes, the plaintiff bears a reduced burden of proof with respect to causation. Accordingly, in determining this appeal, we refer to the law developed under FELA, as well as that developed under the Jones Act. See Puthe v. Exxon Shipping Co., 2 F.3d 480, 482 (2d Cir. 1993) (noting that analysis of plaintiff's Jones Act claims is guided by FELA caselaw); Johannessen v. Gulf Trading & Transp. Co., 633 F.2d 653, 656 (2d Cir. 1980) (recognizing that the standard of liability under the Jones Act is the same as that under FELA).

n8 Although we agree with the Sixth and Ninth Circuits that Daubert applies in the context of the Jones Act, we recognize that Daubert's relevancy inquiry may be affected by the reduced statutory burden of proof in such cases. See Daubert v. Merrell Dow Pharm., Inc., 43 F.3d 1311, 1321 (9th Cir. 1995) (noting, in the context of remand from the Supreme Court, that, where the burden of proof to establish causation was "by a preponderance of the evidence," expert testimony that would fail to satisfy Daubert's

reliability inquiry might nonetheless satisfy the relevance inquiry because of the reduced burden of proof). We express no opinion on this issue of whether and how Daubert's relevancy inquiry is affected by a reduced burden of proof, however, as our conclusion that Dr. Bidanset's testimony was properly excluded rests solely on the fact that the testimony failed to satisfy any of the Daubert factors for assessing reliability.

No. 98 CIV. 7126(RPP).

United States District Court,
Southern District New York.

PATRICIA A. WILLS,
Plaintiff,

v.

AMERADA HESS CORP., et al.,
Defendants.

July 9, 2002.

OPINION AND ORDER

ROBERT P. PATTERSON, JR., U.S.D.J.

On January 31, 2002 the Court granted defendant's in limine motion to preclude plaintiff's only expert witness, Jesse H. Bidanset, and granted defendant's summary judgment motion subject to "the right of Plaintiff within twenty days from the date of this decision to file an affidavit showing what additional discovery it seeks and specifically why each such category of discovery might lead the Court to a different conclusion on the issue of causation." On February 28, 2002 plaintiff filed a 57 page affirmation which did not address the Court's order until the final three pages. In those pages, plaintiff listed general areas of discovery it sought, but failed to state, as ordered by the Court, "specifically why each such category of discovery might lead the Court to a different conclusion on the issue of causation." In a

subsequent letter dated March 25, 2002, plaintiff sent an addendum to the Court which consisted of articles regarding the development of endostatin, a recent drug to combat various cancers which were all wholly irrelevant to the issue at hand or any issue in the case.

For the following reasons, defendants' motion for summary judgment is granted.

Procedural Background

On December 23, 1998 a pretrial conference was held and the Court ordered that discovery would be completed by August 31, 1999 and trial held on September 21, 1999.

On May 19, 1999, by memo endorsement, the Court ordered plaintiff to respond to defendants' interrogatories seeking the identity of plaintiff's expert witnesses by May 25, 1999 and to show plaintiff's grounds for maintaining the action as a class action by filing an affidavit by June 3, 1999 demonstrating that a class of plaintiffs exists and that the claims of plaintiff are representative of the claims of each other member of the class. On June 15, 1999, the Court again ordered such an affidavit to be filed by plaintiff by June 29, 1999. On July 7, 1999, this order was extended to July 9, 1999. On July 15, 1999, the plaintiff having failed to comply with these Court orders, the class action allegations of the Complaint were stricken. On June 15, 1999 plaintiff filed a motion to compel discovery of defendants and on August 24, 1999, the Court granted plaintiff's request that this motion be heard on October 14, 1999. The Court also denied plaintiff's application to extend the discovery cut off from August 31, 1999 to January 31,

2000 without prejudice to the application being made on the October 14, 1999 date. Thereafter, by request of plaintiff, the Court extended the return date on plaintiff's motion to November 4, 1999 at which date a hearing was held and the discovery cut off was extended to February 4, 1999. (Tr. 11/4/99, at 91.) On October 14, 1999, upon being advised that plaintiff had not complied with the Court's order of May 19, 1999, the Court again ordered plaintiff to disclose the names of all expert witnesses expected to be called at trial and otherwise comply with Rule 26(a)(2)(A)(B) and (C) by November 1, 1999.

Plaintiff's motion to compel discovery was the subject of the hearing held on November 4, 1999. Plaintiff's motion was for production of the records of all vessels upon which Decedent was employed, including seven specific vessels, all plans, designs drawing, sketches and photographs of the aforesaid vessels, seven types of engineering plans for such vessels, inventories of all of the fixed and portable equipment on such vessels from 1986-1996; drawings, plans, sketches and specifications for cargo pumping systems, cargo tank piping systems, cargo venting systems, domestic water systems, sewage pipe systems, cargo stripping pump systems; and other sketches, photos and drawings; the quantity and identity of petroleum products transported, including twelve petroleum chemical constituents, from 1986-1996; permission to board all the vessels and take diagrams, drawings, and pictures; all voyage cargo manifests, records of consignees, refineries, and consignors selling refined petroleum products for 1986-1996 as well as the log books and records on such vessels form 1986-1996; and all work and medical records, social security numbers and addresses for all

employees of said companies during the same period as well as discovery about the docks and dock equipment at which defendants' vessels had docked for a ten year period.

Defendants answered that they had produced all documents still in their possession responsive to the plaintiff's Request for Production, except medical records of the putative class members, and agreed to provide authorizations for inspection and copying of the designs of vessels in the custody of the New York Shipping Association and for equipment in the custody of manufacturers. Defendants were ordered to provide the names and last known addresses for those former employees who were shipmates of the Decedent and agreed to make their present such employees available for deposition. Defendants were also ordered to search for some additional documents among their tax records and to make additional searches for some documents.n1 The parties were ordered to submit additional briefs on the availability or privacy of the medical records pertaining to putative class members. Plaintiff, having failed to comply with the Court's October 14, 1999 Order, as well as similar orders dating back to May 19, 1999, was ordered to provide expert medical reports within two weeks showing that plaintiff had grounds for concluding that Decedent's squamous cell cancer had been caused by his exposure to petroleum products while employed by the defendants.

On or about November 19, 1999, Plaintiff produced a four page report of Jesse H, Bidanset, Ph.D., a forensic toxicologist, dated November 16, 1999, concluding that Decedent's exposure to Amerada Hess petroleum products caused him to contract squamous cell cancer.

In that report, Dr. Bidanset relied on very limited medical literature which neither provided supporting epidemiological data for his conclusion nor specified facts which correspond to the facts relating to Decedent's employment history. Dr. Bidanset's conclusion was that the Decedent's exposure to Amerada Hess petroleum products containing carcinogenic hydrocarbons "must have been significant." (Bidanset Report at 4.) This first report did not show any basis for that conclusion nor did it explicate the grounds upon which Dr. Bidanset determined the extent of the Decedent's exposure to those hydrocarbons.

By letter dated December 2, 1999, defendants moved for a protective order precluding plaintiff from conducting depositions of Amerada Hess employees and seeking answers to interrogatories and document production until defendants had deposed Dr. Bidanset and the Court had assessed the evidentiary reliability of his opinion.

On December 6, 1999, the Court ordered discovery stayed pending resolution of the defendants' motion to preclude Dr. Bidanset's testimony.

By letter dated December 14, 1999, defendants moved to compel plaintiff to respond properly to defendants' November 22, 1999 Notice to Produce requesting documents pertaining to Dr. Bidanset's opinion.

By letter dated December 17, 1999, plaintiff opposed defendants' motion for a protective order and moved to compel defendants to provide disclosure of outstanding discovery requests, charging that defendants had (a)

engaged in spoliation of evidence, (b) failed to comply with the Court's disclosure orders of November 4, 1999, and (c) otherwise failed to respond to plaintiff's discovery requests and misled the Court.n2 On December 28, 1999, defendants responded to plaintiff's letter of December 17, 1999 and by letters of January 3 and January 6, 2000, plaintiff made arguments in reply.

On January 14, 2000, the Court lifted the stay of discovery to order the defendants to comply with the discovery ordered by the Court on November 4, 1999 and to provide plaintiff with defendants' records of the exposure monitoring of Decedent and medical surveillance records of Decedent conducted pursuant to Coast Guard or OSHA regulations, and any other medical records pertaining to the Decedent in its possession by January 18, 2000. The Court also decided that the December 6, 1999 order staying plaintiff's conduct of depositions would remain in effect until defendants had deposed Dr. Bidanset, and the Court had assessed whether his opinion as to the cause of Decedent's squamous cell cancer was sufficiently scientifically reliable to be allowed into evidence under Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579, 113 S.Ct. 2786, 125 L.Ed.2d 469 (1993) and its progeny.

On April 28, 2000, Dr. Bidanset wrote a twenty-nine page letter report to plaintiff's counsel ("Second Report"). The Second Report was provided to defendants and Dr. Bidanset was deposed on August 16, 2000. On January 2, 2001, defendants filed a motion in limine to exclude Dr. Bidanset's testimony and a motion for summary judgment dismissing plaintiffs' claims. At a conference on January 9, 2001 requested by

plaintiff, plaintiff was ordered to file responsive papers by February 9, 2001. The date for response was reset to February 26, 2001. On February 20, 2001, plaintiff filed a motion in limine pursuant to general maritime law to impose the Pennsylvania Rule as well as papers in opposition to defendants' motions, which included opinions from two newly retained experts, Dr. Alfred Neugut and Dr. Paul Haas.

In its Opinion and Order dated January 31, 2002, the Court found that plaintiff's expert did not offer any scientifically valid opinion as to causation and failed all of the Daubert factors for assessing the reliability of an expert opinion. However, in its papers plaintiff had argued that, "This Court should not exclude the testimony of Dr. Bidanset base [sic] upon his failure to quantify the decedent's exposure, as discovery is incomplete and the Defendants have purposefully deprived Plaintiff of information necessary to quantify the decedent's exposure." (Pl.'s Combined Br. in Opp'n to Defs.' Mot. In Limine to Exclude the Test. and Op. of Dr. Jess H. Bidanset and For Summ. J., at 10.) In view of plaintiff's claim it had been deprived of discovery, the Court permitted plaintiff an opportunity to show the Court what discovery it had been prevented from obtaining and why such discovery would lead the Court to a different conclusion on the issue of causation. Plaintiff's response motion made no showing it was denied any discovery it sought, other than the depositions of defendants' employees and former employees. Instead, plaintiff's papers reinforce the Court's concern that plaintiff wants to use this case to fish for evidence to create a causation theory unsupported by current medical science or to harass defendants into an offer of settlement.

Discussion

Plaintiff requests depositions of Stanley Chelluck and all operating personnel of defendant company including port engineers and port captains. The Court specifically reiterated its stay of depositions of Amerada Hess' representatives by opinion and order dated January 14, 2000 until the Court had assessed whether Dr. Bidanset's opinion as to the cause of the decedent's illness is scientifically reliable to be admitted into evidence thereby implicitly finding that such discovery was not necessary or relevant to plaintiff's expert in formulating his opinion as to the cause of Decedent's illness. Plaintiff has made no attempt to explain why this deposition testimony would change the Court's opinion as to causation at this time.

Plaintiff requests various vessel-related records including the identification of each diesel engine as to its manufacture, model number, serial number, and date of purchase; production of operating and maintenance history records for each diesel engine, including records of emission testing; description of the cargo and "stripping" pumps aboard barges; and production of "voyage records" for each barge upon which decedent served, identifying the quantity of cargo transported, ports of departure and discharge, and other employees who served aboard those barges. Plaintiff also seeks production of all environmental air testing performed by Hess or any third party and the medical records of co-workers. Plaintiff states it needs this discovery to quantify the Decedent's exposure.

Defendants respond that plaintiff has already had access to the requested discovery, to the extent such

records were currently available, via document inspections at the offices of Amerada Hess' counsel and at Spentonbush and authorizations from Amerada Hess to obtain vessel blueprints from third parties. Defendants also assert that the unavailability of certain records was also explained by Amerada Hess. These types of requests were the subject of the November 4, 1999 hearing and the extensive exchanges outlined above. Discovery of these documents was ordered to be completed by February 4, 2000 and defendants submitted letters verifying their completion of these requests which have not been denied by plaintiff. (Def.'s Ex. A.) Since plaintiff had access to the discovery requested, those same document requests will not be honored at this time. As for new requests, the plaintiff had ample time to request any discovery it thought it required during the extensive discovery process. Plaintiff has not demonstrated precisely what documents it may be that it still has not gotten and has not made a sufficient showing of what the relevance of the documentation it seeks is as far as causation is concerned in order for the Court to change its January 31, 2002 opinion.

Plaintiff now seeks permission to conduct exhaust emission tests and other tests unspecified as to type or nature on defendants' barges and tugboats, as well as environmental tests. Since this is a new request after the discovery cut off, since it is now more than seven years since Decedent has worked for Amerada Hess, since the tests are not limited to the vessels on which the Decedent worked, and since any new tests would not be as relevant as the results from tests conducted during his employment which have already been produced to plaintiff, it is denied. Although there might

be some argument that these tests could be relevant, plaintiff's request comes too long after the discovery cut off. The Court's Order and Opinion of January 31, 2002 was intended to allow plaintiff to explicate exactly what discovery it had been denied and to show why such discovery might change the Court's opinion as far as causation is concerned. Plaintiff has made no such showing.

Defendants' motion for summary judgment is granted.

IT IS SO ORDERED.

Dated: New York, New York
July 8, 2002

Robert P. Patterson, Jr.
U.S.D.J.

Footnotes

n1. The scope of the plaintiff's discovery requests and plaintiff's failure to comply with the Court's order to demonstrate that the claims of plaintiff were representative of the claims of the putative class raised questions as to whether plaintiff was engaging in a fishing expedition to harass the defendants into a settlement or in order to conduct an epidemiological survey to develop a theory of causation for Decedent's death for which plaintiff's counsel had no reason to believe there was scientific support when this action was initiated or thereafter.

n2. Plaintiff's accusation of spoliation of evidence was not supported by any direct or circumstantial evidence or hearsay.

No. 98 CIV. 7126(RPP).

United States District Court,
Southern District New York.

PATRICIA A. WILLS,
Plaintiff,

v.

AMERADA HESS CORP., et al.,
Defendants.

July 12, 2002.

JUDGMENT

Defendants having moved this Court for summary judgment pursuant to FRCP 56, and the matter having come before the Honorable Robert P. Patterson, United States District Judge, who on the July 08, 2002, having issued his Opinion (87319) and Order granting defendants' motion for summary judgment, it is,

ORDERED, adjudged and decreed, That for the reasons stated in the Court's Opinion (87139) and Order dated July 8, 2002, defendants' motion for summary judgment dismissing the case is granted.

Dated NYC, NY
July 12, 2002
JAMES M. PARKISON
Clerk of the Court
By:
Deputy Clerk

No. 98 CIV. 7126(RPP).

United States District Court,
Southern District of New York.

PATRICIA A. WILLS,
Plaintiff,

v.

AMERADA HESS CORP., et al.,
Defendants.

January 31, 2002.

OPINION AND ORDER

ROBERT P. PATTERSON, JR., U.S.D.J.

Defendants Amerada Hess Corporation, Spentonbush/Red Star Companies, Inc., Sheridan Transportation Corp., and Hygrade Operators, Inc. move in limine to exclude the testimony and opinions of Plaintiff's expert, Jesse H. Bidanset pursuant to Rule 702 of the Federal Rules of Evidence, and move for an order pursuant to Rule 56 of the Federal Rules of Civil Procedure ("Fed. R. Civ.P.") for summary judgment dismissing any and all claims against Defendants with prejudice. Plaintiff moves in limine to impose the Pennsylvania Rule. For the reasons that follow, Defendant's motion in limine to exclude Plaintiff's expert opinion is granted; Defendants' motion for summary judgment is granted subject to a condition described herein; and Plaintiff's motion in limine to impose the Pennsylvania Rule is denied.

BACKGROUND

I. Procedural History

On October 8, 1998 Patricia A. Wills filed a complaint on behalf of her late husband Ricky Lee Wills individually and as a class action against Defendants for wrongful death under the Jones Act, 46 U.S.C. § 688(a) as a result of exposure to toxic chemicals while working on Defendants' vessels.

On December 23, 1998 a pretrial conference was held and the Court ordered that discovery would be completed by August 31, 1999 and trial held on September 21, 1999.

On May 19, 1999, by memo endorsement, the Court ordered Plaintiff to respond to Defendants' interrogatory seeking the identity of Plaintiff's expert witnesses and Plaintiff's grounds for maintaining the action as a class action.

On October 14, 1999, upon being advised that Plaintiff had not complied with the Court's order of May 19, 1999, the Court ordered Plaintiff to disclose the names of all expert witnesses expected to be called at trial and otherwise comply with Rule 26(a)(2)(A)(B) and (C) by November 1, 1999. At the hearing held on November 4, 1999, on Plaintiff's motion to compel discovery including all Defendants cargo manifests, engineering plans and drawings for all vessels, cargo, piping, cargo pumping equipment, as well as discovery about the docks and dock equipment at which Defendants' vessels docked for a ten year period. Defendants stated that they had produced all documents in their possession responsive

to the Request for Production, except medical records of the putative class members, and agreed to provide authorizations for inspection and copying of the designs of vessels in the custody of the New York Shipping Association and for equipment in the custody of manufacturers. Defendants were also required to provide the names and last known addresses for those former employees who were shipmates of the Decedent and agreed to make their present such employees available for deposition. Defendants were ordered to search for some additional documents among their tax records and to make additional searches for some documents. The parties were ordered to submit additional briefs on the availability or privacy of the medical records pertaining to putative class members. Plaintiff was ordered to provide an expert medical report within two weeks showing that Plaintiff had grounds for concluding that Decedent's squamous cell cancer had been caused by his exposure to petroleum products while employed by the Defendants.

On or about November 19, 1999, Plaintiff produced a four page report of Jesse H. Bidanset, Ph.D., a forensic toxicologist, dated November 16, 1999, concluding that Decedent's exposure to Amerada Hess petroleum products caused him to contract squamous cell cancer. In that report, Mr. Bidanset, who admits his articles have not been peer-reviewed, relied on very limited medical literature which neither provided supporting epidemiological data for his conclusion nor specific facts which correspond to the facts relating to Decedent's employment history. Mr. Bidanset's conclusion was that the Decedent's exposure to Amerada Hess petroleum products containing carcinogenic hydrocarbons "must have been significant." (Bidanset Report at 4.) This first

report did not show any basis for that conclusion nor did it explicate the manner of the Decedent's exposure to those hydrocarbons.

By letter dated December 2, 1999, Defendants moved for a protective order precluding Plaintiff from conducting depositions of Amerada Hess employees and seeking answers to interrogatories and document production until Defendants had deposed Mr. Bidanset and the Court had assessed the evidentiary reliability of his opinion.

On December 6, 1999, the Court ordered discovery stayed pending resolution of the Defendants' motion to preclude Dr. Bidanset's testimony.

By letter dated December 14, 1999, Defendants moved to compel Plaintiff to respond properly to Defendants' November 22, 1999 Notice to Produce requesting documents pertaining to Mr. Bidanset's opinion. By letter dated December 17, 1999, Plaintiff opposed Defendants' motion for a protective order and moved to compel Defendants to provide disclosure of outstanding discovery requests, charging that Defendants have (a) engaged in spoliation of evidence, (b) failed to comply with the Court's disclosure orders of November 4, 1999, and (c) otherwise failed to respond to Plaintiff's discovery requests and misled the Court.n1 On December 28, 1999 Defendants responded to Plaintiff's letter of December 17, 1999 and by letters of January 3 and January 6, 2000, Plaintiff made arguments in reply.

On January 14, 2000, the Court ordered the Defendants to comply with the discovery ordered by the Court on November 4, 1999 and to provide Plaintiff with

Defendants' records of the exposure monitoring of Decedent and medical surveillance records of Decedent conducted pursuant to Coast Guard or OSHA regulations, and any other medical records pertaining to the Decedent in its possession by January 18, 2000. The Court also decided that the December 6, 1999 order staying Plaintiff's discovery would remain in effect until Defendants had deposed Plaintiff's expert, Jesse H. Bidanset, and the Court had assessed whether his opinion as to the cause of Decedent's squamous cell cancer was sufficiently scientifically reliable to be allowed into evidence under Daubert v Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579 (1993).n2

On April 28, 2000, Dr. Bidanset wrote a twenty-nine page letter report to Plaintiff's counsel ("Second Report"). The Second Report was provided to Defendants and Dr. Bidanset was deposed on August 16, 2000. On January 2, 2001 Defendants filed a motion in limine to exclude Dr. Bidanset's testimony and a motion for summary judgment dismissing Plaintiffs' claims. At a conference on January 9, 2001 requested by Plaintiff, Plaintiff was ordered to file responsive papers by February 9, 2001. The date for response was reset to February 26, 2001. On February 20, 2001, Plaintiff filed a motion in limine pursuant to general maritime law to impose the Pennsylvania Rule as well as papers in opposition to Defendants' motions, which included expert opinions from Dr. Alferd Neugut and Mr. Paul Haas.

On February 26, 2001, the Court granted Defendants' application to preclude the opinions of Dr. Alfred I. Neugut and Mr. Paul Haas, two proposed expert witnesses, because Plaintiff had failed to provide timely

disclosure of their identity and expert reports as was ordered by the Court in November 1999 and as is required by Fed.R.Civ.P. 26. Plaintiff submitted three letters, dated February 27, March 5, and March 9, 2001, requesting the Court to reconsider its order. On March 27, 2001, the Court denied Plaintiff's request for reconsideration with prejudice.

II. Facts

Plaintiff asserts Decedent, Ricky Lee Wills, was employed as a seaman by the Defendants from approximately 1986 until August 1995. In Dr. Bidanset's report, in the section entitled "Medical History of Ricky Wills," he stated:

The decedent's medical history relative to his cancer began in December 1995, when his chief complaint was pain along the right mandible with pain in his nose and throat. On or about December 18, 1995, the diagnosis of squamous cell carcinoma of the right mandible and neck area was rendered. On January 5, 1996, surgery, including a right radical neck and right side mandibular reconstruction was performed. The operative report, dated January 5, 1996, provided a diagnosis of squamous cell carcinoma retromolar trigone (true alveolar ridge mandible). The surgical pathology report indicated that 18 of 24 lymph nodes were positive for tumor. Approximately one week later, Mr. Wills developed pneumonia as a complication. A January 26, 1996, operative report indicated a diagnosis of "necrotic cutaneous Kapel portion of the right fibula free mandibular reconstruction (introral). More specifically, the carcinoma is described as C3 and 2AM squamous cell carcinoma of the right alveolar ridge/ right

premolar trigone. On June 6, 1996, Mr. Wills was seen at Tuomey Regional Medical Center in Sumter, South Carolina, where his cancer was evaluated as having progressed to the right neck. He subsequently underwent two cycles of chemotherapy, to be followed by radiation treatment. He developed lower back pain and was found to have several metastatic sites, which included the rib cage and subcutaneous tissues. In July 1996, the decedent presented with chest and lower back pains. At this point, his diagnosis was recurrent carcinoma of the head and neck with jugular nodal recurrences with metastases to the rib cage. Discharged on August 5, 1996, Mr. Wills prognosis was very bleak despite chemotherapy and radiation. An August 27, 1996, admission to Tuomey Regional Medical Center found Mr. Wills with pain in the upper lumbar area, radiating to the left lower extremity. By September 1996, his squamous cell carcinoma was metastatic to the abdomen and bone. Bone marrow also appeared to be involved as he was neutropenic and thrombocytopenic. He was scheduled to transfer to hospice on October 2, 1996, but succumbed to this multiple cancer site disease before that transfer was accomplished.

(Id. at 6.) Dr. W. Duffy, Jr., radiation oncologist, noted in a consultation report of 5/20/96 that "[t]he patient has smoked 2 packs per day since age 16. He has drank alcohol, mainly beer, heavily in the past." (Def.'s Ex. H.)

III. Dr. Bidanset's Background

Dr. Bidanset was not Decedent's treating physician.n3 Dr. Bidanset is a forensic toxicologist with a B.S. in chemistry and a graduate degree in organic chemistry,

who took no courses on toxicology, but worked for 17 years as senior chemist, then toxicologist one, and then chief toxicologist, until 1979 in the Nassau Country Medical Examiners Office. He taught toxicology at St. John's University as a tenured professor for 14 years until 1997. He has been a conract consulting forensic toxicologist with the Rockland County Office of the Medical Examiner since 1974. Dr. Bidanset admitted in his deposition that he has published no peer reviewed articles involving cancer causation except for a segment of a subsection of a chapter that dealt with carcinogenic chemicals and lung cancer. The Federal Judicial Center: Reference Manual on Scientific Evidence, "Reference Guide on Toxicology," ("Reference Manual") at 418 states, "Publication of articles in peer-reviewed journals indicates an expertise in toxicology. The number of articles, their topics, and whether the individual is the principal author are important factors in determining the expertise of a toxicologist." Only 1 to 2 percent of the cases that came to the medical examiner's office where he worked dealt with cancer. (Bidanset Dep. at 52-3.) In the last ten years, as a private consultant, he estimates he has dealt with issues of cancer causation in about five or six asbestos cases and three or four solvent cases. (Id. at 54.) Dr. Bidanset has evaluated and submitted written reports on approximately forty cases each year. (Defs.' Ex. B.)

IV. Dr. Bidanset's First Report

In his first four-page report, dated November 16, 1999, after assessing the nature of the Decedent's employment background and medical history relative to his cancer, Dr. Bidanset engaged in a general review of non-occupational cancer risks. He then stated "[p]

resently evidence suggests that cancers arise from a single abnormally transformed cell" and then wrote "[t] he concept of a threshold or no effect level of exposure to carcinogens is controversial. Since a carcinogen can initiate a change in the subject cell, there is really no safe exposure. There is however strong evidence that a dose-response relationship exists for carcinogens." (Defs.' Ex. B.) He noted that benzene has been grouped by the IARC as a chemical in which occupational exposure has been causally related to human cancer and diesel engine exhaust has been listed as a probable occupational carcinogen. In this first report he relied on three studies. One found an association between PAHs and esophageal cancer, with a relative risk of 1.9, although he doesn't specify what the method of exposure was or how that conclusion was drawn; another reported that "tobacco and alcohol were the major risk factors for squamous cell carcinoma of the neck and head"; and the third found that squamous cell carcinomas of the skin occurred in mice exposed to naphtha, Jet A, JP-4 and crude oils. (Defs.' Ex. B.) He then concluded, "Considering Mr. Wills' age at the time of his death, his exposure to these carcinogenic hydrocarbons must have been significant. According to discussion concerning dose-response relationships, the aggressiveness of Mr. Wills' cancer would lead one to conclude that he was intensely exposed to these carcinogenic hydrocarbons." (Id.)n4

V. Dr. Bidanset's Second Report

In the Second Report (Defs.' Ex. C), Dr. Bidanset first reviewed Medical Surveillance reports for Mr. Wills for 1992, 1993 and 1994 during which Wills had a satisfactory Fit Test Report for an air purifying

respirator and had responded that he could breath through a respirator during his working activities. (Id. at 3.) Dr. Bidanset relied on an affidavit of Mr. Miller to make determinations of Mr. Wills' working conditions, since Mr. Miller had worked with Mr. Wills intermittently on board the Hygrade 22 for about five months in 1995. Miller states that he was aware of and complained of gases, vapors and fumes which permeated both living and work spaces and, apparently, came from spaces between the vapor recovery and from the vessel, that respirators were not serviced, and that members of the crew were not instructed on their use and that he and other members of the crew, including Mr. Wills, experienced dizziness, tremors, headaches, nausea, blurred vision, stomach aches, problems urinating. (Id. at 4.)

The Report next reviewed the affidavit of Richard Rodi who "commented that the leaks described by Mr. Miller were indicative of a poorly maintained barge and its systems," which, Dr. Bidanset stated, would account for the signs and symptoms described by Mr. Miller. Based on Mr. Rodi's affidavit that two diesel engines were used in operations of these barges, Dr. Bidanset states that "[r]ecognizing that the exact exposure to the diesel exhaust is dependent on the operation of the engine, movement of the vessel, wind and weather conditions, and a number of other variables, one could state with reasonable certainty that crew members were continuously exposed to some level of diesel exhaust." (Id. at 5.)

The Report next reviewed the connection between cigarette smoking and squamous cell carcinoma, noting that cigarette smoking is the most frequently reported

cause of squamous cell carcinoma and that a medical history of Mr. Wills obtained by Envirocare Healthy Services on June 19, 1993, indicated Mr. Wills had a smoking history of two packs a day for twenty years. Dr. Bidanset then states, without citing any source, that the usual appearance of squamous cell carcinoma from cigarette smoking takes "decades" to develop. After noting that the hydrocarbons in cigarette smoke are the very same chemicals to which Mr. Wills was exposed in his employment, Dr. Bidanset states that the "latency for the development of cancers as a result of cigarette smoking should be considered in determining the role played by cigarette smoking versus occupational exposure to carcinogenic hydrocarbons" and that "the occurrence of the squamous cell carcinoma in Mr. Wills' case is sufficiently early in his life that one must consider an alternate cause, or at least an interactive process with known carcinogens in petroleum hydrocarbon products." (Id. at 6.)(emphasis added)

The Report next reviewed benzene exposure reports conducted by Clayton Environmental Consultants pertaining to the Defendant's vessels during the years 1992 through 1995. It states that the 1992 and 1993 reports involved vessels on which the Decedent may not have served and was not on board at the time of sampling but that the 1994 and 1995 sampling data involved vessels on which the Decedent served. It also states that neither the air monitoring data or daily logs gave an indication of the cargo of the vessel. (Id. at 6.) He then notes that Mr. Wills' log of days worked and positions held shows that Wills served on the ST114 from June 1 to June 7, 1994, and that a test of the vessel on July 31, 1994 with a result of 6.5 p.p.m. benzene over

5.8 hours, and that Mr. Wills served on the Hygrade 22 in 1995, but not on the testing dates provided, and that on July 1995, a sample from the Hygrade 22 revealed 6.3 p.p.m. benzene over 3.3 hours. Dr. Bidanset acknowledges in the Report that, "He was unable to match any of the exposure monitoring data with the vessels at the exact time Mr. Wills was on board (id. at 6), but concludes that, because Coast Guard Regulation 46 C.F.R. 197.540(a)(1) states that, "The environment samples and personal air monitoring must be conducted so as to determine the representative personal exposure of all persons engaged in each particular operation involving benzene," that "the data can be used to establish that unsafe working conditions existed where accepted standards for benzene exposure were exceeded." (Id. at 7.)n5

The Report next reviews only the benzene exposure reports which exceeded Occupational Safety and Health standards, i.e., permissible exposure limits ("PEL") 1 part per million ("PPM") and short-term exposure limit ("STEL") 5 p.p.m. for 15 minutes. He notes that other hydrocarbons, including polycylic aromatic hydrocarbons were never evaluated and that diesel exhaust components, recently emphasized in government reports as carcinogens were apparently not sampled. (Id. at 7.) The 24 reports reviewed involved 12 different occasions during the four-year period. (Id. at 7-11.)

The Report next reviewed articles in Environmental Health Perspectives, 104:1165-1171 (1996) and 104:1159-1163 (1996), involving the carcinogenicity of benzene and its metabolites, particularly as regards its propensity to cause leukemia. (Id. at 12.)

The Report next reviewed the Material Safety Data Sheets ("MSDS") (id. at 13-17) provided by the defendants and reaches the following conclusions:

4 Residual Fuel Oil is classified by the International Agency for Research on Cancer (IARC) as a Group B substance, i.e., there is sufficient evidence for carcinogenicity in experimental animals but inadequate evidence in humans.

Cat Cracked Slurry Oil (reported to contain 1.5% polycylic aromatic compounds (PACS) and polynuclear aromatic compounds (PNAS) and has been classified by IARC as Group 1 carcinogen; by the National Toxicology Program (NTP) as a carcinogen; and by American Conference of Government Industrial Hygienists (ACGIH) as an A-1 carcinogen, but OSHA found no evidence of carcinogenicity from PNAs. Fuel Oil # 6 has been classified as a Group B carcinogen by IARC. The American Petroleum Institute states similar products produce skin cancer in experimental animals but has not determine significance of human exposure to Fuel Oil # 6.

Marine Diesel Fuel is not expected to be a cancer hazard under normal conditions of use, but IARC has classified whole diesel exhaust as Group 2A, i.e., probably carcinogenic. National Institute of Occupational Safety and Health (NIOSH) classifies diesel exhaust as a potential cause of lung cancer (Tumorigin).

Gasoline, Premium Unleaded, Unleaded Plus, and Regular Unleaded contain benzene is concentrations of .1% to 4.9%, which is recognized as causing anemia and

other blood disorders, including leukemia, after repeated and prolonged exposure. IARC lists gasoline and gasoline exhaust in Group B as sufficient evidence for carcinogenicity in experimental animals, but inadequate evidence in humans. Benzene is listed as carcinogenic in humans by IARC, NTP, OSHA and ACGIH.

Kerosene, Jet Fuel A/A1 and # 1 Diesel are classified by OSHA, IARC and NTP as non-carcinogenic, although similar products produce skin cancer and skin tumors in laboratory animals after repeated application without washing or removal.

2 Diesel, the MSTS states, "Longtime exposure to vapors has caused cancer in some laboratory animals." No mention of diesel exhaust.

2 Fuel Oil exhaust particulates is classified by IARC as Group 2A, i.e., probably carcinogenic in humans.

The Report then discusses polycyclic aromatic carbons ("PAHs") in exhaust gas and studies which concluded that there was a clear carcinogenic effect of inhaled PAHs containing exhaust gas in rats and mice; a study of engine room conditions showing no exposure to PAHs in air samples, but some in skin exposure; and another study, using epidemiological evidence, found that there was a substantial increased risk of lung, skin and bladder cancer in occupations involving heavy exposure to PAHs. (Id. at 18-19.)n6

Turning to Diesel Exhaust Emissions, the Report first states that epidemiological studies of trainmen, truck and bus drivers' exposure can be distinguished as those populations undergo less exposure than barge operators. It then reviews those studies that found (1) epidemiological evidence diesel exhaust containing PAHs was "suggestive of a carcinogenic effect", or was "a probable human carcinogen"; and (2) that rats exposed to automotive diesel exhaust demonstrated increased prevalence of lung tumors and squamous cell carcinoma. (Id. at 19-21.)

Turning to gasoline and gasoline exhaust emissions, the Report cites (1) a study of refinery workers which did not suggest a kidney or liver cancer risk in humans, and (2) a study of gasoline exhaust painted on the skin of mice induced squamous cell carcinomas and papillomas and a study finding that PAHs of three or more rings implanted in the lungs of rats caused lung cancer. (Id. at 22.)

Turning to animal studies of hydrocarbons and benzene, the Report (at 23-25) points out that leukemia is the most widely accepted cancer associated with benzene exposure, but that (1) a study of rats who ingested 500 mg/kg of benzene in olive oil once daily, four to five days per week for 104 weeks, developed squamous cell carcinomas in the oral cavity; (2) that mice exposed to 1200 ppm. benzene vapor for six hours a day, five days per week for ten weeks developed an instance of squamous cell carcinoma (of unknown origin); and (3) that rats and mice receiving three oral doses of benzene (50,100 and 200 mg/kg) in corn oil caused increased incidence of zymbalgland carcinomas and squamous cell papillomas and carcinomas.

Based on this review of the evidentiary material and authorities, Dr. Bidanset opined that Wills' exposures to known carcinogens from the cargoes carried or combustion emissions "was a factor in the development of Mr. Wills' squamous cell carcinoma of the head and neck." (Id. at 29.)

VI. Dr. Bidanset's Testimony

Dr. Bidanset's testimony did not rely on any documents or studies not included in his reports, but clarifies that his theory that Mr. Will's death was caused by the conditions of his employment is based on the oncogene or no-threshold theory, not a dose-response determination. He admits he did not quantify Mr. Wills' exposure to benzene or PAHs.

Q: Have you computed any dosage for benzene for Mr. Wills?

A: No.

...

Q: Have you quantified Mr. Will's exposure to PAHs?

A: I don't think I can....

(Bidanset Dep. at 76, 72.) He explains, "[f]or most toxic events, there is a relationship, a dose-response relationship, between the amount of material that's absorbed into the body and the intensity of the event. In some instances that is not necessarily the case. There are certain toxic events that do not demonstrate a dose-response relationship." (Bidanset Dep. 59-60.)

"There is no threshold value for carcinogenic activity and you do not need to have a dose-response relationship associated with low level exposures." (Id. at 63). When asked for a definition of the oncogene theory that he is using, Dr. Bidanset replied,

One of the short term assays for carcinogenicity involves the exposure of cell culture to measured amounts of a carcinogen and then the observation of changes in activity that are associated with mutation in the genes. This test is referred to as the Ames test, and has been used widely to evaluate chemicals and drugs for potential carcinogenic and mutagenic activity. Ames originally designed the test to measure genetic changes, gene mutations, but the ability to use that assay and to determine the carcinogenic activity of a compound is widely accepted at this point. For cancers whose origin involves the mutation of the genes, then the oncogene theory would apply. There are other kinds of cancers which do not obey the oncogene theory, that is, they involve a different mechanism by which the cancer is developed.

...

Q: Am I correct in understanding that one of the features of the oncogene theory is that a solitary exposure would be sufficient to initiate the cell transformation that leads to the cancer?

A: That's true.

(Id. at 66-7; 68.)

As to whether Mr. Wills cancer, squamous cell carcinoma, obeys this theory, the following exchange is illustrative:

Q: Does squamous cell carcinoma obey the oncogene theory?

A: I believe it does.

Q: What is the basis for your opinion?

A: Because the basis--the basis of the opinion is that the transformed cell is the initiation of tumor activity. And the squamous cell carcinoma is one that obeys that oncogene theory.

Q: How do you know that?

A: Just basically, my background experience and reading. I couldn't point you to a specific reference.

Q: Can you name any cancer that does not obey the oncogene theory?

A: I can't think of any at the moment.

Q: Do you hold the opinion that squamous cell carcinoma obeys the oncogene theory to a reasonable degree of scientific certainty?

A: Yes, that's my opinion.

(Id. at 67-8.) He also admits that he can only use benzene, not the other chemicals he discusses, under the oncogene theory.

Q: And is your opinion that Mr. Will's squamous cell carcinoma was caused by his exposure to benzene [and] polycyclic aromatic hydrocarbons based upon the oncogene theory of carcinogenicity?

A: Because you've included benzene in the picture, I would say yes, benzene very definitely has been associated with the modification of the gene structure. The polycyclic aromatic compounds, I'm not sure. I don't know that they would apply to the oncogene theory or not.

(Id. at 70-71.)

DISCUSSION

I. Defendants Motion in Limine

Defendants argue that Dr. Bidanset's opinions do not meet the standard for the admission of scientific expert testimony under Fed.R.Evid. 702 or Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579 (1993); that Dr. Bidanset has arrived at his conclusions in a manner that fails to comport with the recognized methodology for determining causation in toxic tort matters; that Dr. Bidanset's failures a) to quantify Decedent's exposure to benzene and polycyclic aromatic compounds ("PAHs"), b) to identify any relevant studies finding an increased risk of squamous cell carcinoma of the head and neck as a result of exposure to such substances, and c) to exclude all other potential causes of the illness including Decedent's documented smoking and drinking illustrate that his opinion is not scientifically valid and is unreliable. (Defs.' Mot. in Limine at 1.)

Plaintiff's responsive argument concerning the admissibility of Dr. Bidanset's testimony and opinion centers around the low level of burden of proof given to Jones Act plaintiffs and the claim that discovery is incomplete. However, as the Ninth Circuit stated in Claar v. Burlington N. R.R. Co., 29 F.3d 499, 503 (9th Cir.1994), "[t]he standard of causation under FELA and the standards for admission of expert testimony under the Federal Rules of Evidence are distinct issues and do not affect one another."n7 The court went on to say,

[i]t is true that under FELA the quantum of evidence sufficient to present a jury question of causation is less than it is in a common law tort action.... This does not mean, however, that FELA plaintiffs need make no showing of causation. Nor does it mean that in FELA cases courts must allow expert testimony that in other contexts would be inadmissible.... FELA plaintiffs still must demonstrate some causal connection between a defendant's negligence and their injuries.

Id. The inquiry of the Court as to whether Dr. Bidanset's reports and testimony are admissible under Rule 702 of the Federal Rules of Evidence and Daubert remains the same regardless of the level of the burden of proof. In every case, to be admissible, an expert's opinion must be based on scientifically reliable methods subject to the requirements of Rule 702 of the Federal Rules of Evidence and Daubert.

Plaintiff filed a Surreply Brief on March 13, 2001 that was not authorized under the Federal Rules of Civil Procedure and was not authorized by the Court. The Surreply Brief states in a conclusory manner that Dr. Bidanset's findings are supported by scientific research

proving that benzene contributes no matter how slight to squamous cell carcinoma but does not demonstrate any basis for that statement other than Dr. Bidanset's oncogene (no-threshold) theory.n8 Plaintiff's Surreply Brief characterizes Dr. Bidanset's testimony as concluding that "the combined exposure to benzene, PAHs, and diesel exhaust fumes aboard Defendants' vessels ... were a possible contributing cause of decedent's squamous cell carcinoma." (Surreply at 6.) Possibilities are not a substitution for demonstrating a scientifically acceptable basis for concluding that the cancer was caused by that exposure.

II. Analysis of Dr. Bidanset's Opinion

A. Dr. Bidanset's First Report

The paucity of support for his opinion in his First Report demonstrates that Dr. Bidanset was ready to form a conclusion first, without any basis, and then try to justify it. He appears to be claiming that he is using the dose-response theory to conclude Decedent was "intensely exposed to these carcinogenic hydrocarbons" and yet he makes no attempt to quantify Decedent's level of exposure, the essential step in using the dose-response theory. (Defs' Ex. B.) The Ninth Circuit has noted that, "... scientists whose conviction about the ultimate conclusion of their research is so firm that they are willing to aver under oath that it is correct prior to performing the necessary validating tests could properly be viewed by the district court as lacking the objectivity that is the hallmark of the scientific method." Claar v. Burlington N. R.R. Co., 29 F.3d 499, 503 (9th Cir.1994). In his deposition, when questioned about his first report, he admits that his statement "the

aggressiveness of Mr. Wills cancer would lead me to conclude that he was intensively exposed to these carcinogenic hydrocarbons" (id.) was based on speculation.

Q: Can you point me to any studies that correlate aggressiveness of cancer with intensity and exposure to toxic substances?

A: I'm not prepared to do that today. My thoughts at the time that I prepared that particular opinion were that from the time of diagnosis to the time of his death that the cancer progressed quite rapidly, metastasized and ultimately took his life. It would have been my--and it is my opinion which that's a sign of aggressiveness and relates to hydrocarbon exposure, but I can't point you to any study that would document that.

(Bidanset Dep. 99.) As for the three studies cited in the First Report, none relate Decedent's type of cancer to any of the particular substances to which he may have been exposed. One, in fact, reports "tobacco and alcohol were the major risk factors for squamous cell carcinoma of the neck and head." Dr. Bidanset, however, appears to rely on the statement in that study that "occupational exposures play a minor, though definite, role in the development of head and neck cancers." (Defs.' Ex. B.) None of these studies support his conclusion in that Report that "Mr. Wills' occupational exposure to various petroleum products was the most probable cause of his squamous cell carcinoma." (Id.) Dr. Bidanset's willingness to draw such a conclusion without a scientific basis in his first report is troubling.

B. Second Report

In his Second Report, dated April 28, 2000, Dr. Bidanset concludes that Mr. Wills was exposed to benzene, PAHs and diesel exhaust emissions from cargo carried on the vessels on which the Decedent worked as a master, and that "these exposures, to known carcinogens from the products or combustion emissions was a factor in the development of Mr. Wills' squamous cell carcinoma of the head and neck." (Defs.' Ex. C at 29.) This second report does not provide any basis to reach this conclusion other than the fact that Mr. Wills worked on various vessels of the Defendants during the period 1986 to 1993; that those vessels operated with diesel engines and carried petroleums, some of which included carcinogens; and that on twelve occasions during the period 1992-1995, some of the Defendants' vessels had benzene emissions that exceeded OSHA standards. Dr. Bidanset cites no evidence that Mr. Wills was on those vessels on those dates or during those occasions, although he reviewed all the logs of Decedent's voyages and all the emission reports which were conducted by a third party.

The Reference Manual advises,

An opinion on causation should be premised on three preliminary assessments. First, the expert should analyze whether the disease can be related to chemical exposure by a biologically plausible theory. Second, the expert should examine if the plaintiff was exposed to the chemical in a manner that can lead to absorption into the body. Third, the expert should offer an opinion as to whether the dose tot which plaintiff was exposed is sufficient to cause the disease.

Reference Manual at 419.

Turning to the second and third factors in the Reference Manual first, it states in regards to the second factor, "Evidence of exposure is essential in determining the effects of harmful substances." Reference Manual at 424. In Dr. Bidanset's report he notes, "During the collection, there could have been excursions well above the average and certainly above the acceptable standard." (Defs.' Ex. C at 11.) This possibility is far from a fact to be used in scientifically sound reasoning. Dr. Bidanset acknowledges that he was "unable to match any of the exposure data, which indicated excursions above the acceptable standard for benzene, with Mr. Wills' presence on board the vessels at the time of testing." (Id. at 25.)

Also, at least one court has found it inappropriate to use OSHA standards to determine causation of a disease. Sutera v. Perrier Group of America, Inc., 986 F.Supp. 655, 664 (D.Mass.1997); ("... a regulatory standard, rather than being a measure of causation, is a public health exposure level that an agency determines pursuant to statutory standards set by Congress."). Dr. Bidanset relies on the affidavit of Mr. Miller, another seaman, to support his conclusion as to the extent and manner of the Decedent's exposure. Dr. Bidanset equated Decedent's exposure to Mr. Miller's even though they only worked together intermittently for five months and had different occupations. He equated Miller's habits in using protective equipment and washing to those of Decedent without any justification. Although Mr. Miller can smell, there is no evidence that he has the expertise to determine the toxicity of fumes. At his deposition, Dr. Bidanset did

not identify the grounds for Mr. Miller's conclusory allegation that his exposure was harmful.

Q: Do you have any reason to think that Mr. Miller had any qualification to offer an opinion as to what odor was harmful and toxic as opposed to those that are non-harmful and non-toxic?

A: I don't know what Mr. Miller's qualifications were. He simply became aware of these odors and--my recall is that he had a whole set of symptoms that he described as a result of that exposure. So whether he was a toxicologist or medical professional, he experienced harmful and toxic effects from it. He related those to the odors that he was experiencing. I don't think it necessarily requires a professional expertise.

(Bidanset Dep. at 103.) Mr. Miller has initiated his own lawsuit in New York Supreme Court against Defendants for being exposed to harmful toxic odors, but not for developing cancer or squamous cell carcinoma. Studies offered by the Plaintiff indicate that placement on a boat can be very significant in the various levels of possible exposures. One states "[c]aptains experience almost no chemical exposure." (Pl.'s Ex. 11 at 186.)

As for the third factor, exposure to a sufficient dose to cause the disease, the Reference Manual notes, "The certainty of the expert's opinion depends on the strength of the research data demonstrating a relationship between exposure and the disease at the dose in question and the absences of other disease-causing factors (also known as confounding factors)."

Reference Manual at 423. In the section of Dr. Bidanset's Second Report entitled "Animal Studies Relative to Benzene's Carcinogenic Potential," he writes, "the most widely accepted cancer associated with benzene exposure in humans is leukemia. Some recently published animal studies strongly suggest that benzene may produce cancer at other target sites." (Defs.' Ex. C at 24.) Dr. Bidanset appears to be stating that he is not even sure whether benzene is capable of causing Decedent's cancer. He cites a 1982 study by Maltoni which shows that 5% of male rats and 10% of female fats developed squamous cell carcinoma of the oral cavity after ingesting 500mg/kg of benzene in olive oil once daily, 4-5 days per week, for 104 weeks. He also cites a 1989 study by Huff and colleagues at the National Institute of Environmental Health that indicates a correlation of oral ingestion of benzene and squamous cell carcinoma in rats who received three oral doses of benzene (50, 100, and 200 mg/kg) in corn oil. However, there is no evidence that Decedent orally ingested benzene or that he ingested 500 mg a day for 104 weeks, nor do these studies support Dr. Bidanset's conclusion that one exposure to benzene is sufficient to develop squamous cell carcinoma. Dr. Bidanset cites a 1988 Synder study that involved inhalation of benzene. However, in that study mice were exposed to 1,200 ppm of benzene vapor for 6 hours per day, 5 days per week for 10 weeks. They found 14 tumors in the treated group, with one instance of squamous cell carcinoma of unknown origin. The dose involved in that study was a huge dose, and Dr. Bidanset has not shown that there is any reason to believe that Decedent was exposed to anywhere near that dose. Not only does no study support a conclusion of dose-response causation, none of the studies cited by Dr. Bidanset support his conclusion

based on the oncogene theory that one exposure to benzene would have been capable of causing Decedent's cancer.

In eliminating other possible causes, Dr. Bidanset noted in his first report a reference to an article in which "the authors reported that tobacco and alcohol were the major risk factors for squamous cell carcinoma of the neck and head." (Defs.Ex. B.) In his second report he stated, "[t]his reviewer recognizes that cigarette smoking is the most frequently reported cause of squamous cell carcinoma and also that Mr. Wills smoked 1-2 packs per day for twenty years." (Defs.' Ex. C at 5.) Although he calculated this as 20-40 pack years, he then rejected cigarette smoking as a possible basis for Mr. Wills' cancer saying, "[t]he usual appearance of the squamous cell carcinoma from cigarette smoking requires decades to develop, usually appearing in the form of lung cancer rather than mandibular, head and neck cancer." (Id.) However, the article that he, himself, has cited in his first report cites tobacco and alcohol as the major risk factor for squamous cell carcinoma of the neck and head and the latency period for squamous cell carcinoma Dr. Bidanset is using for Mr. Wills' occupational exposure to benzene and PAHs in the employ of Defendants is eight years and Dr. Bidanset is satisfied that eight years is enough. He can point to no studies as a basis for that view. Instead, he admits that there are no human studies that support that conclusion because there are no human studies on benzene and PAHs and that the animal studies are not determinative. (Bidanset Dep. at 113.) He does not even try to exclude Decedent's history of alcohol consumption, a major risk factor of squamous cell carcinoma of the head and neck, even though he notes

that a doctor's report in 1994 stated that Decedent had slightly elevated liver function and should follow up with a private physician and avoid alcohol. (Defs.' Ex. C at 3.) Decedent's doctor, in a report dated April 20, 1996 stated, "[h]e has drank alcohol, mainly beer, heavily in the past." (Defs.' Ex. H.)

C. Dr. Bidanset's Oncogene Theory

For the examination of the first factor in the Reference Manual of whether the disease can be related to chemical exposure by a biologically plausible theory, it is useful to examine the Daubert factors. The Supreme Court stated a court should assess whether the "reasoning or methodology underlying the testimony is scientifically valid and of whether that reasoning or methodology properly can be applied to the facts in issue." Daubert at 592-3. That assessment includes the following: (1) whether it can be and has been tested; (2) whether it has been subject to peer review and publication; (3) for a scientific technique, the known or potential rate of error and the existence and maintenance of standards controlling the technique's operation; and (4) general acceptance. Id. at 593-5. The Court noted, "[w]idespread acceptance can be an important factor in ruling particular evidence admissible, and 'a known technique which has been able to attract only minimal support within the community,' may properly be viewed with skepticism." Id. at 594 (quoting United States v. Downing, 753 F.2d 1224, 1238 (3rd Cir.1985) (internal citation omitted).) The Supreme Court emphasized, however "[m]any factors will bear on the inquiry, and we do not presume to set out a definitive checklist or test." Id. at 593.

Although the criteria listed in Daubert are not supposed to be exhaustive or definitive, they provide a convenient starting point for analyzing the opinion of Dr. Bidanset. Dr. Bidanset's conclusion that Mr. Wills' cancer was caused from an exposure, no matter what the level, to toxic chemicals, namely benzene and PAHs is not expressly addressed in his reports, only in his deposition. When asked for the basis of his opinion, Dr. Bidanset says "Just basically my background experience and reading. I couldn't point you to a specific reference." (Bidanset Dep. at 67.) Because Dr. Bidanset's theory that Decedent's illness, squamous cell carcinoma, obeys the oncogene theory merely relies on his background experience and reading, there is no evidence it has been tested. Thus, it fails the first Daubert factor. Nor has Dr. Bidanset given any indication it has been subject to peer review publication, failing the second Daubert factor. Dr. Bidanset himself has not written any publications in this area and admits the oncogene theory itself is controversial. (Bidanset Dep. at 62-3.) The third Daubert factor is the known or potential error rate of the expert's theory. Nowhere in his Reports or testimony does Dr. Bidanset provide a known or potential error rate for the oncogene theory.

The fourth Daubert factor is general acceptance in the scientific community. Courts should pay particularly close attention to experts who depart from generally accepted scientific methodologies. Allen v. Pennsylvania Engineering Corp., 102 F.3d 194, 197 n. 4 (5th Cir.1996). As the Seventh Circuit noted in Braun v. Lorillard Inc., 84 F.3d 230, 235 (7th Cir.1996), cert. denied, 519 U.S. 992 (1996), "A judge or jury is not equipped to evaluate scientific innovations. If, therefore

an expert proposes to depart from the generally accepted methodology of his field and embark upon a sea of scientific uncertainty, the court may appropriately insist that he ground his departure in demonstrable and scrupulous adherence to the scientist's creed of meticulous and objective inquiry."

Dr. Bidanet admits that the "generally accepted" theory is the dose-response relationship and that the oncogene theory that he is using is controversial. "The classical thinking is that if a dose-response relation doesn't exist, that you haven't proven a cause and effect. What I'm saying is that there is an ongoing controversy with that opinion." (Bidanset Dep. at 62.) As the court in Mancuso v. Consolidated Edison Co. of NY, 56 F.Supp.2d 391, 399 (S.D.N.Y.1999) pointed out, the generally accepted methodology for determining whether a person's illness was caused by a specific toxin, as prescribed by the World Health Organization and the National Acadamy of Sciences, and recommended by the Reference Manual, is a three-step process:

First, the level of exposure of plaintiff to the toxin in question must be determined; second, from a review of the scientific literature, it must be established that the toxin is capable of producing plaintiff's illness--called "general causation"--and the dose/response relationship between the toxin and the illness--that is, the level of exposure which will produce such an illness--must be ascertained; and third, "specific causation" must be established by demonstrating the probability that the toxin caused this particular plaintiff's illness, which involves weighing the possibility of other causes of the illness--a so-called "differential diagnosis."

Dr. Bidanset admitted during his deposition that he did not quantify Plaintiff's level of exposure to benzene or PAHs. (Bidanset Dep. at 72, 76.) He admits there are no epidemiologic studies finding an increased risk of squamous cell carcinomas in humans as a result of exposure to either benzene or PAHs. (Id. at 75.) As to whether the particular toxins Mr. Wills may have been exposed to are capable of producing Mr. Will's particular illness, he relies on animal studies that he himself states are not always reliable and none relate to Mr. Wills particular illness. (Id. at 45-46.) As for "differential diagnosis," he admits that smoking and drinking are the largest risk factors for squamous cell carcinoma of the neck and head, yet decides that the latency period of twenty years as a smoker is not enough, while concluding, without any basis, that an eight year latency period is enough under the oncogene theory. (Id . at 112-113.)

Other courts have similarly rejected expert opinions that are based on the "no-threshold" model as exemplified by Dr. Bidanset's assertion that "[t]here is no threshold value for carcinogenic activity, and you do not need to have a dose-response relationship associated with low level exposures." (Bidanset Dep. at 63.) As one court explained in excluding the plaintiffs' experts using the same no threshold theory, "[t]he linear non-threshold model cannot be falsified, nor can it be validated. To the extent that it has been subjected to peer review and publication, it has been rejected by the overwhelming majority of the scientific community. It has no known or potential rate of error. It is merely an hypothesis." Whiting v. Boston Edison Co., 891 F.Supp. 12, 25 (D.Mass.1995). "In layman's terms, the model assumes that if a lot of something is bad for you,

a little of the same thing, while perhaps not equally bad, must be so in some degree. The model rejects the idea that there might be a threshold at which the neutral or benign effects of a substance become toxic." Id. at 23. Sutera v. Perrier Group of America Inc., 986 F.Supp. 655, 666 (D.Mass.1997) ("Accordingly, although there is evidence that one camp of scientists ... believes that a non-linear model is appropriate basis for predicting the risks of low-level exposures to benzene, there is no scientific evidence that the linear no-safe threshold analysis is an acceptable scientific technique used by experts in determining causation in an individual instance.").

As recognized by the Reference Manual, "For agents that produce effects other than through mutations, it is assumed that there is some level that is incapable of causing harm.... Theoretically, any exposure at all to mutagens may increase the risk of cancer, although the risk may be very slight and not achieve medical probability." Reference Manual at 426. Dr. Bidanset has simply provided no information relating to Decedent's exposure to a level of toxins that would cause harm in humans. Without this essential information, a scientifically reliable opinion cannot be formed. See, e.g., Mitchell v. Gencorp Inc., 165 F.3d 778, 781 (10th Cir.1999) ("[g]uesses, even if educated, are insufficient to prove the level of exposure in a toxic tort case"); Wright v. Willamette Industries, Inc., 91 F.3d 1105, 1107-8 (8th Cir.1996).

Dr. Bidanset admitted during his deposition that benzene can be found in "smoke from fires, from wood products, from synthetics such as PVC and also from natural fires" as well as fruits, fish, dairy products,

ambient environment and answered "correct" to the question "would you agree that pursuant to the oncogene theory, exposure in any of those settings or any of those substances could trigger the single molecular transformation that could lead to a carcinogenic process?" (Bidanset Dep. at 94-5.) He also replied yes to the question, "If I understand you correctly, then, pursuant to the oncogene theory while you don't apply a dose-response relationship, you have concluded that the occupational on board exposure was more likely the cause because there was more of an exposure to hydrocarbons." (Id. at 97.)

Dr. Bidanset's theory would lead to an impossible link of causation. If one exposure is sufficient for causation, there would be no way to determine which exposure caused a particular cancer since we are exposed to carcinogens to some degree in the ambient environment on a daily basis.

In the Second report, Dr. Bidanset opines that Mr. Wills' exposure to PAHs was a factor in his development of squamous cell carcinoma. However, in his deposition he says he is not sure that PAHs obey the oncogene theory that he is using for Decedent's possible exposure to benzene. (Bidanset Dep. at 71.) He also admits that without quantifying Decedent's exposure he cannot opine as to a causal relationship based upon dose response. (Id.) Therefore, Dr. Bidanset admits that he draws a conclusion as to PAHs being a factor in Decedent's illness without any basis whatsoever. He similarly asserts that Decedent's encounters with diesel exhaust emission were a factor in his illness without offering any basis for his conclusion.

Plaintiff's expert is using a controversial theory that some toxins do not follow the dose-response relationship, but that any amount of exposure causes cancer. Even though benzene and PAHs have been shown to cause some types of cancer, it is too difficult a leap to allow testimony that says any amount of exposure to these toxins caused squamous cell carcinoma of the head and neck in the Decedent. Dr. Bidanset admits that he "believes" squamous cell carcinoma obeys the oncogene theory even though he can point to no scientific basis for this belief, just his background experience and reading. He also says he cannot use this theory for the possible exposure to PAHs, but still asserts that this possible exposure was a factor, but offers no scientific basis for that conclusion. Although Plaintiff tries to argue that she would use the accepted dose-response relationship if she had more discovery, that is not relevant to the issue of whether the conclusion that Plaintiff's expert has drawn is scientifically reliable under Daubert. The opinion of Dr. Bidanset that any exposure Mr. Wills may have had to benzene and PAHs can cause squamous cell carcinoma of the head and neck is merely a hypothesis. It is not grounded in reliable scientific methods, but only Dr. Bidanset's presumptions. It fails all of the Daubert factors. Therefore, Defendant's motion in limine to exclude the testimony and opinions of Plaintiff's expert, Jesse H. Bidanset is granted.

III. Pennsylvania Rule

Plaintiff's reliance on The Pennsylvania, 86 U.S. 125 (1873) is misplaced. As Plaintiff states The Pennyslvania did involve claims of liability by the owners of two ships involved in a collision and held that

where a ship was in violation of a navigation rule intended to prevent collisions "the burden rests upon the ship of showing not merely that her fault might not have been one of the causes, or that it probably was not, but that it could not have been. Such a rule is necessary to enforce obedience to the mandate of the statute." (Pl.'s Brief in Supp. of Mot. in Limine at 3.) Plaintiff goes on to argue that the Supreme Court in Kernan v. American Dredging Co., 355 U.S. 426 (1958) applied The Pennsylvania to a case where a fire on a tug which killed a seaman was caused by an open flame kerosene lamp carried on a scow in statutory violation. (Pl.'s Brief in Supp. of Mot. in Limine at 4.) Plaintiff is incorrect. The Supreme Court's holding in Kernan was that in the absence of any showing of negligence the Jones Act permits recovery for the death of a seaman resulting from a violation of a statutory duty. Id. at 431 (emphasis added). Kernan does not cite The Pennsylvania or in any way rely on it. Instead, the Supreme Court relied on the FELA and Jones Act standard of the employer's liability for damages when injury is caused, in whole or in part, by the employer's fault. Id. at 432.

In Re Seaboard Shipping Corp., 449 F.2d 132 (2d Cir.1971), which is also relied on by Plaintiff, was an action between a barge owner and a tug owner each charging negligence by the other. At issue were the damages paid in settlement of claims on behalf of two seaman on the barge who had drowned during a storm. The legal basis for the claim for the death of the seamen was not at issue. Accordingly, the reliance of the Seaboard court on The Pennsylvania does not support reliance on The Pennsylvania in a wrongful death claim, the situation in this case.

Jones v. Spentonbush-Red Star, 155 F.3d 587 (2d Cir.1998) was an action for a seaman's injury on board a ship. It did not apply the Pennsylvania Rule. It rejected the plaintiff's claim that the Pennsylvania Rule should be applied because defendant's violation of OSHA regulations were not violations of Coast Guard regulations or maritime statutes. Id. at 595. However, Jones does not constitute a holding that the Pennsylvania Rule is applicable here.n9

Wilkins v. American Export Isbrandtsen Lines, Inc., 446 F.2d 480 (2d Cir.1971) is a case more similar to this one. There, the decedent, Chief Officer of the ship, was required to put in overtime hours in the performance of his duties in violation of 46 U.S.C. §§ 235 and 673 and shortly thereafter died of an acute heart attack. The trial judge rejected the decedent's widow claim as in The Pennsylvania that the burden was on the shipowner to prove that its statutory violation not only did not, but could not have contributed to the decedent's death. Plaintiff also relied on Kernan. The court point out that Kernan did not go so far as to hold that a causal connection was presumed to exist between the statutory violation and the alleged injury (id. at 484 n. 8) and cited Nolan v. Greene, 383 F.2d 814, 817 (6th Cir.1967) holding that for the burden to shift "there must be a causal connection between the breach of the statutory duty and the death of the seaman ." (emphasis added.) After considering The Pennsylvania, the court determined it should not be extended "beyond the chosen area of ship collisions to embrace Jones Act cases." Wilkins at 486.

Based on this decision, The Pennsylvania is not applicable here. Under Kernan and Wilkins, Plaintiff

must show evidence of a causal connection between Defendants' alleged violation of Coast Guard regulations and the Plaintiff's injury. Plaintiff has failed to present admissible evidence of causation. Accordingly, her motion in limine is denied.

IV. Summary Judgment

To survive Defendants' motion for summary judgment, Plaintiff was required to offer admissible expert testimony showing that exposure to chemicals in the workplace caused Decedent's squamous cell carcinoma and death. As no admissible testimony of causation of Decedent's squamous cell carcinoma by Plaintiff has been offered, summary judgment is granted subject to Plaintiff's right within twenty days to submit an affidavit stating what further discovery it seeks and specifically why each such category of discovery would lead the Court to a different conclusion on causation.

Review of Dr. Neugut's affidavit reveals that his opinion has not reached a conclusion based on the dose-response theory of causation. He also does not say what theory of causality he is using. His conclusion is "it is my belief, within a reasonable degree of medical probability, that the occupational exposures that Ricky Wills had as an employee at Amerada Hess raised the risk and was a cause and /or contributing factor to his developing squamous cell carcinoma of the oral cavity. While I recognize that he was, in fact, a heavy cigarette smoker and moderate alcohol user as well, ... this would not preclude the impact of his occupational exposures." (Pl.'s Ex. 9 at 12.) Not only does Dr. Neugut seem unwilling to assert causation to a reasonable degree of medical certainty, he bases his opinion on Mark Miller's

inexpert assertion that fumes encountered on the ship were toxic, and he fails to establish the Decedent's exposure or the dose. Even if Dr. Neugut's testimony and Dr. Haas' testimony, which did not deal with the issue of causation, had been admitted, summary judgment would still be properly granted. As for Plaintiff's claim of maintenance and cure, to be eligible "a seaman must be 'in the service of the ship' at the time of the illness or injury" Nelson v. Research Corp. of University of Hawaii, 805 F.Supp. 837, 853 (D. Hawaii 1992) or "where the illness has not manifested itself until after a seaman has left the ship, the seaman must be able to offer convincing proof of causal connection between the alleged injury and his service on the ship." Id. (citing Brahms v. Moore-McCormack Lines, Inc., 133 F.Supp. 283, 286 (S.D.N.Y.1955)). As the illness did not manifest itself during the Decedent's employment nor has a convincing proof of causal connection been made between his injury and that employment, Plaintiff's claims for maintenance and cure are also dismissed.

CONCLUSION

For the foregoing reasons, Defendants' motion in limine to exclude the testimony and opinions of Plaintiff's expert is granted; Defendants' motion for summary judgment is granted subject to the right of the Plaintiff within twenty days from the date of this decision to file an affidavit showing what additional discovery it seeks and specifically why each such category of discovery might lead the Court to a different conclusion on the issue of causation. Defendants will have twenty days to respond if an affidavit is filed; Plaintiff's motion in

limine to impose the Pennsylvania Rule is denied.

IT IS SO ORDERED.

Dated New York, New York
January 31, 2002

Robert P. Patterson, Jr.
U.S.D.J.

Footnotes

n1. Plaintiff's accusation of spoliation of evidence was not supported by any direct or circumstantial evidence or hearsay.

n2. The Plaintiff's remaining discovery requested had raised questions as to whether Plaintiff was engaging in a fishing expedition to harass the Defendants into a settlement or in order to conduct an epidemiological survey to develop a theory of causation for Decedent's death for which Plaintiff had no reason to believe there was scientific support for when this action was initiated.

n3. Although Decedent's treating physician would be within the power of the Plaintiff to produce, Plaintiff is not relying on evidence from a treating physician or on any autopsy report linking Decedent's squamous cell carcinoma to any chemical exposure that may have occurred while he was working aboard Defendants' vessels.

n4. During his deposition Dr. Bidanset admits that this statement is based on speculation. (Bidanset Dep. at 99.)

n5. The Regulation quoted does not state that the exposure monitoring data is representative of personal exposure on dates other than the dates monitored.

n6. Barge operations are not mentioned.

n7. Standards of proof are the same under the Jones Act and FELA. In re Hechinger, 890 F.2d 202, 208 (9th Cir.1989), cert denied, 498 U.S. 848 (1990).

n8. Plaintiff's claim that the dose-response relationship between benzene and squamous cell carcinoma of the skin of mice does not demonstrate a cause of internal squamous cell carcinoma of the jaw and neck in humans and there is no epidemiological study cited by Bidanset to show causation of that cancer.

n9. Its parenthetical articulation of the Seaboard decision is misleading.

Docket No. 02-7913

UNITED STATES COURT OF APPEALS
FOR THE SECOND CIRCUIT

PATRICIA A. WILLS, individually and as personal representative of the Estate of RICKY LEE WILLS, deceased, on behalf of Ricky Lee Wills and those persons similarly situated,
Plaintiff-Appellant,

v.

AMERADA HESS CORP., SPENTONBUSH/RED STAR COMPANIES, INC., SHERIDAN TRANSPORTATION CORP. and HYGRADE OPERATORS INC.,
Defendants-Appellees.

Filed: December 29, 2004

A petition for panel rehearing and a petition for rehearing en banc having been filed herein by the appellant Patricia A. Wills.

Upon consideration by the panel that decided the appeal, it is Ordered that said petition for rehearing is DENIED.

It is further noted that the petition for rehearing en banc has been transmitted to the judges for the court in regular active service and to any other judge that heard the appeal and that no such judge has requested that a vote be taken thereon.

For the Court,

Roseann B. MacKechnie, Clerk

By:
Motion Staff Attorney

Supreme Court, U.S.
FILED
AUG 8 - 2005
OFFICE OF THE CLERK

(2)

No. 04-1640

IN THE

Supreme Court of the United States

PATRICIA A. WILLS, individually and as personal representative of the Estate of RICKY LEE WILLS, deceased,

Petitioner,

v.

AMERADA HESS CORP., SPENTONBUSH/RED STAR COMPANIES, INC., SHERIDAN TRANSPORTATION CORP., and HYGRADE OPERATORS INC.,

Respondents.

ON PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE SECOND CIRCUIT

BRIEF IN OPPOSITION

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QUESTION PRESENTED

Respondents object to Petitioner's Question Presented and offer the following as the correct issue to be considered on the Petition for Writ of Certiorari.

Does the burden-shifting rule announced in *The Pennsylvania*, 86 U.S. (19 Wall.) 125 (1874), apply in a non-collision Jones Act, 46 U.S.C. App. § 688, *et seq.*, action when a plaintiff is unable to prove any nexus between the violation of a statute and the injury suffered?

STATEMENT PURSUANT TO RULE 29.6

Respondent Amerada Hess Corporation has has no parent corporation and no publicly held company owns 10% or more of its stock. All the other Respondents are wholly-owned subsidiaries of Amerada Hess Corporation.

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INTRODUCTION

In the decision below, the Court of Appeals for the Second Circuit held that a 19th century admiralty rule, announced by this Court in *The Pennsylvania*, 86 U.S. 125, 22 L.Ed. 148 (1874), does not apply in a wrongful death action arising under the Jones Act, 46 U.S.C. § 688, *et seq.*, to altogether relieve a plaintiff seaman's representative from proving causation, notwithstanding allegations of maritime violations. In fact it was determined by the court, as a matter of law, that plaintiff failed to prove any nexus between her decedent's injury (and subsequent death) and the alleged violation of a maritime statute.

The Jones Act was passed in 1920 to grant a seaman a cause of action against his employer for negligence and provides, in pertinent part:

> Any seaman who shall suffer personal injury in the course of his employment may, at his election, maintain an action for damages at law, . . . and in case of the death of any seaman as a result of any such personal injury the personal representative of such seaman may maintain an action for damages at law with the right of trial by jury, and in such action all statutes of the United States conferring or regulating the right of action for death in the case of railway employees shall be applicable . . .

46 U.S.C. § 688.

The 19th century rule now known as "*The Pennsylvania* Rule" arose from a maritime collision. In *The Pennsylvania*, 86 U.S. 125, this Court held that if a vessel involved in a casualty violates a maritime statute, the vessel has the burden of proving that the violation could not have contributed to the casualty. *See Jones v. Spentonbush-Red Star Co.*, 155 F.3d 587 (2d Cir. 1998). In *The Pennsylvania*, 86 U.S. 125, a sailing ship and a steamboat collided in a dense fog with poor visibility. Although the steamer traveled at an excessive rate of speed and the sailboat rang a warning bell, the Court criticized the sailboat for violating a maritime statute requiring a foghorn and not a bell as the appropriate signal to be given by sailboats traveling in dense fog. This Court held that,

> [i]t must be conceded that if it clearly appears the fault could have had nothing to do with the disaster, it may be dismissed from consideration. The liability for damages is upon the ship or ships whose fault caused the injury. But when, as in this case, a ship at the time of a collision is in actual violation of a statutory rule intended to prevent collisions, it is no more than a reasonable presumption that the fault, if not the sole cause, was at least a contributory cause of the disaster. In such a case the burden rests upon the ship of showing not merely that her fault might not have been one of the causes, or that it probably was not, but that it could not have been. Such a rule is necessary to enforce obedience to the mandate of the statute.

Id. at 136. This presumption arises from the probability that in maritime cases a collision is likely the result of a faulty ship. *See Wilkins v. Am. Exp. Isbrandtsen Lines, Inc.*, 446 F.2d 480, 485 (2d Cir. 1971).

BRIEF IN OPPOSITION

For the reasons set forth below, Respondents Amerada Hess Corporation, SpentonBush/Red Star Companies, Inc., Sheridan Transportation Corporation, and Hygrade Operators, Inc. (collectively herein, "Respondents") respectfully request that the Petition for Writ of Certiorari be denied.

STATEMENT OF THE CASE

Introduction

Review of this case is not necessary. This matter involves a Petitioner who seeks to invoke *The Pennsylvania* Rule in a non-collision Jones Act case. Both the United States District Court, Southern District of New York (hereinafter, "District Court") and the United States Court of Appeals for the Second Circuit (hereinafter, "Second Circuit"), below, declined to apply the Rule. The courts held, as a matter of law, that the Petitioner, Patricia A. Wills (hereinafter "Petitioner"), failed to prove any nexus between her husband-decedent's illness and death and a violation of a statute under the Jones Act (Pet. App. 19a-20a; 89a-90a).

Petitioner incorrectly asserts that there is a "majority" of Circuits (and the Supreme Court of Alaska) whose decisions are contra to decisions of a "minority" of circuits, including the Second Circuit. Indeed, as shown below, only the Fifth Circuit, arguably, might decide this matter differently, which Respondents do not concede. However, there is no doubt, based on the facts in this case, that the majority of the Circuits that have addressed this issue, including those cited by Petitioner, would decide this case

in favor of Respondents. There is certainly not a split among the Circuits. Moreover, *the decisions of the Second Circuit and District Court herein are correct and do not conflict with any decision of this Court* (Emphasis added). Further review is therefore not warranted.

Factual and Procedural History

The critical facts for the purpose of review of the Petition for a Writ of Certiorari are relatively few.[1] Decedent Ricky Lee Wills (hereinafter "Decedent") served as a seaman aboard vessels owned and operated by Respondents. In October 1998, Petitioner, wife and executrix of the decedent's estate, filed a wrongful death action in the U.S. District Court for the Southern District of New York, under The Jones Act, 46 U.S.C. § 688, *et seq.*, alleging, among other theories of liability, that decedent developed squamous cell carcinoma of the head and neck as a result of his exposure to various petroleum products in the course of his employment as a seaman aboard the Respondents' vessels (Pet. App. 3a).

On January 21, 2002, Respondents filed a motion *in limine* for summary judgment and a motion to exclude Petitioner's expert testimony (Pet. App. 5a). In an Opinion and Order, dated January 31, 2002, the District Court granted Respondent's motion to exclude the proposed expert testimony and opinions, "finding them to be without sufficient indicia of reliability as required for admissibility under Rule 702 of the Federal Rules of Evidence." (Pet. App. 6a; 52a-91a). In fact, the court determined that the proffered expert opinion, specifically that decedent developed

1. A complete recitation of the relevant facts and procedural history may be found in the Opinion rendered by the Second Circuit (Pet. App. 2a-11a).